This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

NYPL RESEARCH LIBRARIES
3 3433 08242679 6

A

BRIEF RETROSPECT

OF THE

EIGHTEENTH CENTURY.

PART THE FIRST;

IN THREE VOLUMES:

CONTAINING

A SKETCH

OF THE

REVOLUTIONS AND IMPROVEMENTS

IN

SCIENCE, ARTS, AND LITERATURE,

DURING THAT PERIOD.

BY SAMUEL MILLER, A.M.

ONE OF THE MINISTERS OF THE UNITED PRESBYTERIAN CHURCHES IN THE CITY OF NEW YORK, MEMBER OF THE AMERICAN PHILOSOPHICAL SOCIETY, AND CORRESPONDING MEMBER OF THE HISTORICAL SOCIETY OF MASSACHUSETTS.

VOL. III.

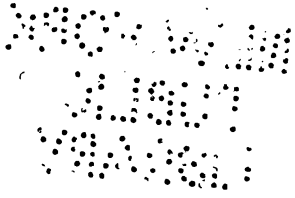
Printed at New York.

LONDON:

REPRINTED FOR J. JOHNSON, ST. PAUL'S CHURCHYARD,

By Ellerton & Byworth, Johnson's Court, Fleet Street.

1805.



CONTENTS

OF

THE THIRD VOLUME.

		Page
CHAPTER XX.	Poetry	1
	§ 1. *Epic Poetry*	7
	§ 2. *Didactic Poetry*	14
	§ 3. *Moral and Devotional Poetry*	19
	§ 4. *Satirical Poetry*	22
	§ 5. *Descriptive Poetry*	29
	§ 6. *Pastoral Poetry*	32
	§ 7. *Lyric Poetry*	35
	§ 8. *Elegiac Poetry*	38
	§ 9. *Drama*	40
	General Observations	61
	American Poetry	67
	General Reflexions	69
CHAPTER XXI.	Literary Journals	73
CHAPTER XXII.	Political Journals	88
CHAPTER XXIII.	Literary and Scientific Associations	99
	American Societies and Academies of Arts and Sciences	103
	——— *Historical Society*	104
	——— *Medical Societies*	105
	——— *Agricultural Societies*	106
	General Observations	107
CHAPTER XXIV.	Encyclopædias and Scientific Dictionaries	109
CHAPTER XXV.	Education	117
CHAPTER XXVI.	Nations lately become literary	152
	§ 1. *Russia*	153
	§ 2. *Germany*	166
	§ 3. *United States of America*	186
Recapitulation		286
Additional Notes		325

A

BRIEF RETROSPECT

OF THE

EIGHTEENTH CENTURY.

CHAPTER XX.

POETRY.

POETRY, in one form or another, has been the growth of every age with the history of which we are acquainted; and the eighteenth century had its full share of those who paid their court to the Muses. It may be said with confidence, indeed, that the last age produced a far greater number of poets than any former period of the same extent. But it must be confessed, that of this number few are entitled to the character of distinguished excellence. The mantle of Shakspeare or of Milton has not fallen upon any succeeding bard. Since the death of the latter, more than a century has passed away without producing a rival of his great and deserved fame. Still it may be maintained that poets, and poetic excellence, have been produced, of sufficient distinction to do high ho-

nour to modern genius, and to merit a respectful consideration.

The poetic diction and versification of several modern languages have been much enriched and refined during the period under review. Of these improvements it may be proper to take some brief notice, before we proceed to consider the particular specimens of poetic genius which belong to this age.

During the century in question, English versification has been greatly improved. Though Dryden, at the close of the preceding century, had done much towards the promotion of this object; yet the style of English poetry was left by him in an irregular, harsh, and incorrect state. He was succeeded by Mr. Pope, whose successful exertions to polish, refine, and regulate the language of our poetry, are well known*. If Dryden displayed more vigour of genius and more sublimity of conception than Pope, the latter undoubtedly exhibits a degree of correctness and elegance of diction, and of harmony and sweetness of numbers, which had never been equalled by any preceding poet, and which have never been exceeded since his time. "New sentiments, and new images," says a great critic, "others may produce; but to attempt any further improvement of versification will be dangerous. Art and diligence have now

* A friend of learning and taste, on reading what is said of the comparative merits of these two great English poets, made the following remark: "Dryden, in my opinion, did more to improve English versification than Pope: the interval is wider between Dryden and the best of his predecessors, than between Dryden and Pope."

done their best; and what shall be added will be the effort of tedious toil and needless curiosity*."

English poetry is also indebted to several who have written since Mr. Pope. The names of these, and the nature and amount of the services which they rendered, will be more fully brought to the mind of the intelligent reader in reviewing hereafter the particular works by which they are most honourably known to the public.

About the beginning of the seventeenth century there was a race of versifiers in Europe, and especially in Great Britain, who have been called by the critics *metaphysical poets*†. They were generally men of learning, and many of them endowed with genius; but were either destitute of taste, or possessed only that which was false and perverted. Pedantic, subtle, obscure, and confused, they presented absurd and gross conceits, rather than just images; scholastic refinements, rather than copies of nature; and far-fetched ideas and illustrations, to display their reading, rather than that chaste simplicity which delights, and that "noble expanse of thought which fills the whole mind." This race of poets, if such they may be called, did not become extinct till toward the close of the seventeenth century. Cowley, Waller, Denham, and many others, were infected with the false taste which they had propagated, and thus extended the mischief. Milton, though he adopted, in one instance, the manner of these metaphysical versifiers, yet in general disdained

* *Life of Pope*, by Johnson. † *Life of Cowley*, by Johnson.

it, and contributed much to discourage the unworthy fashion. Dryden went still further, in some respects, in rectifying the public taste. But toward the close of the century a style of poetry which had so long, and on such high authority, maintained its ground, ceased to be popular. The English poetry of the eighteenth century, therefore, is in general more delicate in its sentiments, more correct and elegant in its diction, more chaste in its figures and illustrations, more harmonious in its numbers, and on the whole more simple and natural in its structure, than that of any preceding age.

The improvements in *French* poetry, in the century under consideration, though worthy of notice, have been less numerous and remarkable. With the nature of these, however, and the persons to whom the honour of effecting them is chiefly due, the author is not sufficiently acquainted to enable him to speak distinctly. In improving the poetry of *Italy*, *Spain*, and *Portugal*, it is believed that still less has been done within the last hundred years; but of this, also, too little is known to warrant an attempt to give any distinct views of the subject.

The poetic character of *Germany* rose to great eminence in the latter half of the eighteenth century. Among the earliest and most successful labourers in attuning the German language to poetry were Haller, Kleist, Klopstock, Gesner, and Wieland. Before the works of these great literary reformers appeared, this language could scarcely boast of any poems superior to those of Gottsched and Schoonaik. A poetic diction was

to be formed. Accordingly baron Haller is said to have written his poem on *Reason*, *Superstition*, and *Infidelity*, for the express purpose of proving that the German language was capable of an advantageous application to moral and philosophical poetry. It was before remarked, that Klopstock was eminently successful in improving the versification of his native language. His *Messiah*, on its first appearance, was severely criticised on account of the novel expressions and combinations which it contained; but these innovations soon gained credit, and were generally adopted; and the author may be said to have formed a new era in German poetry. Gesner and Wieland carried these improvements still further. Beside these, the writings of Gellert, Lessing, Gleim, and several others, have contributed largely to enrich and refine the versification of their country; insomuch that the poetry of Germany, which, half a century ago, was scarcely thought worthy of notice, may be reckoned at the present day among the most polished, harmonious, and spirited, in the republic of letters.

The poetry of Sweden received, during the same period, improvements of a similar nature. About the middle of the century arose Dahlin, the father of Swedish poetry. He attained high excellence in the epic, tragic, and lyric departments of poetic composition, and contributed much towards establishing the reign of taste in his country. To him many successors have arisen, some of whom have pursued with honourable success the same track. Among these, the most conspicuous are count de Creutz, count de Gyllenborg, madame

de Nordenflycht, count Oxenstierna, Kellgren, Leopold, Lidner, Torild, and several others, whose writings abundantly testify, that the Swedish language, notwithstanding its former defects, is capable of exhibiting, under the hand of a master, all that harmony, tenderness, and force, which, when united, render the productions of the poet so interesting. The labours of Kellgren, in particular, for a number of years past, to polish and refine the versification of his country, are said to have been eminently successful, and highly honourable to his character *.

The poetry of *Russia* is almost wholly the growth of the eighteenth century. Cantemir, Ilinski, Frediatofski, and a few others, adventured in this new field at a very early period of the century; but they were rather rhymers than poets. The first respectable poet in the Russian language was Lomonozof, who wrote about the middle of the century. His compositions are principally of the lyric kind, which, for originality, energy of language, and sublimity of sentiment, deserve much praise. He was followed in this career of improvement by Sumorokof, who is represented as the founder of the Russian drama, and one of the most successful refiners of the poetic language of his country. To these succeeded a number of poets, who all contributed something to improve the versification of this language; among the most distinguished of whom are Kheraskof and Karamsin. The *Rossiada* of the former, as it has been greatly admired by the author's countrymen, so its ap-

* See Catteau's *View of Sweden*, and Acerbi's *Travels*.

pearance doubtless formed an important era in the progress of their poetic character. The various works of Karamsin are also entitled to respectful notice among the valuable contributions to this branch of literary improvement.

After these preliminary remarks concerning the refinements and riches which have been communicated to the poetic language of several countries of Europe, it may be proper to take a brief review of the principal productions to which the eighteenth century gave birth, in the various departments of poetry; after which the way will be prepared for some general reflexions on the poetic character of the age.

SECTION I.

EPIC POETRY.

In *Epic* poetry the period of this Retrospect produced few specimens above mediocrity. The *Henriade* of Voltaire stands at the head of the list. This performance, like most of the works of its celebrated author*, discovers great genius, and

* Few literary men in the eighteenth century rendered themselves more conspicuous than Francis Arouet de Voltaire. He was born in 1694, at Paris, where he died in 1778. Endowed with an uncommon share of wit, humour, fancy, and taste, he was distinguished as an interesting and entertaining writer for more than half a century. He enjoyed a high reputation, not only as an epic poet, but also as a dramatist, an historian, a no-

has been the subject of high applause, particularly among French critics. For boldness of conception, general felicity of language, and just and noble sentiments, it is entitled to honourable distinction. But, from a real or supposed inaptitude of the French language for the majestic character of epic composition; from the indiscreet choice of a modern hero, and a recent train of events in the author's own country, as the subject; and from some egregious faults in the incidents and machinery; the best critics have denied to this poem the praise of first-rate excellence.

The *Leonidas* of Mr. Glover is one of the most meritorious efforts in the department of epic poetry which English literature presented during the age under consideration*. This work has long maintained a high character among English critics. The *Calvary* of Mr. Cumberland is entitled to the next place; a poem which has been pronounced to be "imbued with the genuine spirit of Milton, and destined, therefore, most probably, to immortality." Though the author has not, perhaps, given sufficient scope to his imagination, but confined himself too closely to the sacred his-

velist, an essayist, and a miscellaneous writer. His talents were so various, that there is scacely any department of literary labour in which he has not left something, which, taken alone, would show him to have been an eminent man. It is to be lamented that his talents were so much devoted to the cause of impiety and licentiousness; and that he so often betrayed a willingness to set all principle, truth, and decorum at defiance, for the purpose of attacking the religion and the character of Christians.

* Glover wrote a second epic poem, entitled *The Athéniad*, which has been praised, but is generally considered as inferior to his *Leonidas*.

tory, for the full exertion of his poetic strength, yet both the plan and execution of his work do him immortal honour, and afford high pleasure both to the critic and the Christian. *Joan of Arc*, by Mr. Southey, while it obviously betrays the haste and carelessness with which it was written*, discovers at the same time the undoubted genius and taste of the author†. The sentiments in general are noble and generous; the characters introduced are for the most part well supported; the imagery is bold and impressive; and the versification, without being always correct, is easy, harmonious, and beautiful. To these may be added *The Epigoniad*, by Dr. Wilkie‡; *Arthur, or the Northern Enchantment*, by Mr. Hole; and several other epic poems, which, though not entitled to rank with those above mentioned, yet do credit to the poetic talents of their respective writers.

But if no poet since the time of Milton have honoured our language with a work which deserves to be compared with the *Paradise Lost*, yet this period has not passed without two important events: the *Iliad*, that great parent stock

* *Joan of Arc* probably furnishes the first instance in the history of literature of an epic poem of equal length being written in *six weeks!*

† In the composition of *Joan of Arc* Southey was assisted by his friend Coleridge, a poet of great genius and taste.

‡ *The Epigoniad*, by the rev. Dr. William Wilkie of North Britain, is an epic poem of some merit, but far from being entitled to a place in the first class. This writer has been called the "Homer of Scotland." His work was first published in 1757, and reached a second edition in 1759. He died at St. Andrews in 1772.

of epic productions, was incorporated with English poetry, in the course of the century, by the genius of Mr. Pope; and *Fingal* and *Temora* were recalled from a long oblivion by the labours of Mr. Macpherson. In the former, this age may boast of having produced the noblest translation ever presented to the republic of letters; and in the latter, of having recovered a work of true and uncommon genius, which, on several accounts, will probably be read with pleasure for many centuries to come, whatever opinion may be formed with respect to its origin*.

The history of German literature, during the eighteenth century, presents us with an epic poem which some have brought into competition with the *Paradise Lost*. This is the *Messiah* of Klopstock†, a work which has been, perhaps, more read throughout the literary world, and honoured with more general approbation, than any other poetic production of the same country. The *Messiah* certainly may be, in some respects, advantageously compared with the *Paradise Lost*. Though the former does not possess the "gigantic sublimity" of the latter, yet it elevates the mind by the grandeur and novelty of its fiction, and displays more tenderness and pathos‡. The

* The poems of *Ossian*, a little before the close of the century, were translated into Italian, by Cæsarotti, with great elegance.

† This illustrious poet of Germany, whose works do honour to his country and his age, was born in 1724. The first part of his *Messiah* was published in 1748, and the remainder in 1773. He died toward the close of the year 1802.

‡ Herder, an eloquent German writer, thus compares the *Paradise Lost* and *The Messiah*: "The edifice of Milton is a stede

Death of Abel is not less familiar to every intelligent reader, and its merits have been generally acknowledged*. *Oberon*†, an epic romance, by Wieland, discovers the bold and vigorous imagination, and the felicity of description, for which the author has been long celebrated‡.

In the Swedish language we also find, in the century under review, two respectable productions of the epic class. The first is entitled *Swedish Liberty*, and is a performance of Dahlin, who was before mentioned as the father of poetry in

fast and well-planned building, resting on ancient columns: Klopstock's is an enchanted dome, echoing with the softest and purest tones of human feeling, hovering between heaven and earth, borne on angels' shoulders. Milton's muse is masculine: Klopstock's is a tender woman, dissolving in pious ecstasies, warbling elegies and hymns. When Music shall acquire among us the highest powers of her art, whose words will she select to utter but those of Klopstock?" *Letters on Humanisation.* This is quoted from the *Literary Hours* of Dr. Drake, who says that "impartial posterity will probably confirm the judgement of Herder." A good English translation of *The Messiah* is still a *desideratum.*

* The *Death of Abel*, like several other works of the same author, is written in a kind of loose poetry, unshackled by rhyme and a precise uniform adherence to measure. It has been said that this method of writing is peculiarly suited to the German language. It is to be lamented that this work, as well as the *Messiah*, has never been advantageously presented in an English dress.

† *Oberon* has been translated by Mr. Sotheby into English, in a style of elegance which does him great honour.

‡ *Oberon*, though the best, is not the only epic poem produced by Wieland. His *Idris*, his *Neuen Amadis*, and his *Liebe um Liebe*, were prior in time, but inferior in merit. They have, however, been highly commended, particularly by the critics in the author's own country.

that country. This work, with several essential faults, combines beauties and excellences which render it worthy of attention. The other work which comes under the same denomination is *The Passage of the Belt*, by count de Gyllenborg, from which the author has derived considerable reputation among his countrymen. The *Rossiada* of Kheraskof, a Russian nobleman, was before mentioned as entitled to respectful notice, not only because it possesses considerable merit as a poem, but because it was the first successful attempt to inlist the Russian language in the service of the epic muse, and because its appearance may be considered as forming an important epoch in the history of Russian poetry.

The translations of different epic poems, in the course of this century, were so numerous, that to give a list and character of them all would lead us into a field far too extensive. But it would be unpardonable, even in this short sketch, to omit taking notice of a few beside those which have been already mentioned. The celebrated Italian epic poem *Gierusalemme Liberata*, by Tasso, has also been elegantly translated into English, during this period, by Mr. Hoole. The first three books had been previously presented in an English dress by Mr. Brooke; on whose work Mr. Hoole passes the most liberal encomiums. To give a version of the whole was reserved for the latter gentleman, who executed the task with very honourable success. Shortly afterwards, the *Lusiad* of Camoens, on which the Portuguese rest their claim to epic honours, was translated into English by Mr. Mickle, which, in spirit and elegance, is con-

sidered by some respectable critics, as rivalling the first productions of the kind in our language *.

The *Iliad* was translated, for the first time, and with considerable ability, into the Spanish language, about thirteen years ago, by don Garcia Malo. The same monument of Grecian genius was also translated not long since, with high reputation, into the German language, by Voss, a distinguished poet of that country; and into Italian by the abate Cæsarotti. These several works are said to be considered, by their respective countrymen, as productions of the first class. To these may be added the translation of the *Iliad*, into English blank verse, by Mr. Cowper, which, though a more faithful version than the work of Mr. Pope, falls short of it with respect to merit as a poem †. The *Æneid* has also been translated into German, by Voss, before mentioned; into Italian by M. C. Bendi; and into English by Mr. C. Pitt. The work of the last-named poet, though inferior to Dryden's translation in vigour and sprightliness, yet excels it in uniformity, correctness, and splendour of versification. Lucan's *Pharsalia*, as translated into English by Rowe, is pronounced by an eminent critic to be one of the greatest productions of English poetry; to exhibit more successfully than almost any

* It is the opinion of some good judges that the *Lusiad* of Mickle is much superior to the *Lusiad* of Camoens. The translator has certainly, in some respects, improved on the original, and made many additions.

† This translation, however, has great merit as a poem. Indeed Gilbert Wakefield observes, that whoever wishes to see *Homer* in an English dress, must read Cowper's version.

other the genius and spirit of the original; and to deserve a much higher degree of approbation than it has generally obtained *.

SECTION II.

DIDACTIC POETRY.

In this species of poetic composition the eighteenth century produced some works of great excellence, a few of which may be compared, without disadvantage, with the best specimens of any preceding age. The *Essay on Criticism*, by Mr. Pope, as it was one of his earliest compositions, so it is also one of his best †. In the opinion of a great critic "it exhibits every mode of excellence that can embellish or dignify didactic composition; selection of matter, novelty of arrangement, justness of precept, splendour of illustration, and propriety of digression." The *Essay on Man* ‡, by the same author, though in some re-

* *Life of* Rowe, by Johnson.

† He produced this work at twenty years of age, and is pronounced by Dr. Johnson never afterwards to have excelled it.

‡ It has been often said that lord Bolingbroke had some agency in the composition of the *Essay on Man*. The following extract of a letter from the late reverend Dr. Hugh Blair, of Edinburgh, will probably be considered as deciding the fact. "In the year 1763, being at London, I was carried by Dr. John Blair, prebendary of Westminster, to dine at old lord Bathurst's. The conversation turning on Mr. Pope, lord Bathurst told us, that the *Essay on Man* was originally composed by lord Boling-

spects of inferior excellence, has been incomparably more read, and, in general, more highly applauded. This performance is not distinguished by much novelty of sentiment, or felicity of invention; but seldom have common ideas been presented with so much "beauty of embellishment," or so much "sweetness of melody." Seldom have opinions of questionable propriety been more happily disguised, or exhibited with such "dazzling splendour of imagery," and "seductive powers of eloquence." *The Fleece*, by Mr. Dyer, notwithstanding the small degree of distinction which it has attained, is pronounced, by good judges, to stand among the most excellent poems of the didactic kind which the moderns have produced. *The Pleasures of the Imagination*, by Dr. Akenside, is also a performance which belongs to this class; and is, doubtless, one of the most beautiful specimens that our language affords. Genius, learning, taste, pure morality, and liberal philosophy, shine in every page. Dr. Armstrong, in his celebrated poem on the *Art of Preserving Health*, though he did not aim at so elevated a strain as Akenside, has produced a

broke, in prose, and that Mr. Pope did no more than put it into verse: that he had read lord Bolingbroke's manuscript in his own hand-writing, and remembered well that he was at a loss whether most to admire the elegance of lord Bolingbroke's prose, or the beauty of Mr. Pope's verse. When lord Bathurst told this, Mr. Mallet bade me attend, and remember this remarkable piece of information; as by the course of nature I might survive his lordship, and be a witness of his having said so." —Boswell's *Life of* Johnson, vol. iii, p. 133.

work of high excellence *. Never sinking below the dignity of his subject, he is always chaste, correct, instructive, and elegant. *The Grave*, a didactic poem, by Blair, is a work of great merit, and general popularity; highly poetical in its diction, and just and elevated in its sentiments.

The *English Garden* of Mr. Mason, may also be mentioned as a very finished and interesting specimen of didactic composition. Simple, natural, and interesting in his descriptions, luminous and instructive in his philosophy, and purely moral in his sentiments, he is by no means the least of those authors on whose works the honour of English poetry, for the last fifty years, must rest. In the *Botanic Garden*, by Dr. Darwin, there is a bold attempt "to inlist Imagination under the banner of Science," to an extent beyond example. In this attempt the author has been successful to a degree which does him much honour as a poet. He unites great extent of learning with singular variety and felicity of allusion, and a pleasing harmony and splendour of versification. But it must be acknowledged that there is a uniformity, which at length fatigues, and does not so much interest the reader as many less correct and less regular performances †. The *Minstrel*, by Dr.

* Lord Monboddo pronounces this poem to be the best specimen of didactic poetry in the English language, and equal to any ancient or modern.—*Origin and Progress of Language.*

† It has been suggested that the author of the *Loves of the Plants* was considerably indebted to the *Connubia Florum* of de la Croix, both in the plan and execution of his work. This beautiful Latin poem was first published in France, about the

Beattie, which may without impropriety be mentioned under this head, beside the most engaging pictures of nature, abounds in the richest sentimental, moral, and poetical beauties. The *Essays* on *Painting*, *History*, and *Epic Poetry*, by Mr. Hayley, though partaking of the historical and descriptive, are also didactic in their character, and exhibit a very large share of erudition, correctness, elegance, and poetic taste.

Beside the specimens of didactic poetry above mentioned, English literature furnished a number of others, during the period under consideration, which, though not in the first rank of excellence, are yet entitled to respectful notice. The *Chace*, by Somerville, to a just and intelligent view of its subject, adds felicity and variety of description, and elegance of language. The *Infancy* of Dr. Downman discovers him to have been a good poet, an excellent medical philosopher, and a friend to morality and virtue. The

year 1727, and was reprinted at London, with notes and observations by sir Richard Clayton, in 1791. If Dr. Darwin had ever seen de la Croix's work (which can scarcely be questioned) some deduction must be made from his claim to originality. Still, however, the *Botanic Garden* will be entitled to no small share of applause as a poem. Though many of the opinions of the author must be considered as erroneous; though his poetry evinces more taste than genius, more labour than invention, and displays more meretricious glare than chaste ornament; and though much of the praise which was bestowed on the work soon after its appearance must be deemed extravagant; yet since the author of the *Pursuits of Literature* pronounced judgement upon it, its poetic character has perhaps, in the estimation of many, sunk too low. Dr. Darwin is far from standing at the head of modern poets; but he holds a place greatly above mediocrity.

Mine, a dramatic poem, by Mr. Sargent, is considered by good judges as a work of genuine philosophical and poetical merit. And the *English Orator*, and *Local Attachment*, by Mr. Polwhele, display much excellent sentiment and just precept, in very harmonious verse.

With the didactic poetry produced on the continent of Europe during the last age, the author has but little acquaintance. The *Prædium Rusticum* of father Vaniere, a Jesuit of France, published about the beginning of the century, has been ever since celebrated in the literary world as a specimen of elegant Latin poetry, connected with excellent precepts and just sentiments. The *Connubia Florum* of M. de la Croix, also a Latin poem, and published a few years after the *Prædium Rusticum*, is scarcely less remarkable for the purity, vivacity, and elegance of its diction, the ingenuity of its fable and imagery, and the general soundness of its philosophy. Father Boscovich's poem, *De Solis ac Lunæ Defectibus*, has been pronounced an ingenious and able production. The abbé Delille, in his *Garden*, a didactic and descriptive work, presented his countrymen with a poem, which, though it does not display great invention, has been highly and justly applauded for the beauty of its descriptions, and the excellence of its versification *. To these

* "Voltaire, in his discourse pronounced at his reception into the French academy, gives several reasons why the poets of that country have not succeeded in describing rural scenes and employments. The principal one is, the ideas of meanness, poverty, and wretchedness, which the French are accustomed to associate with the profession of husbandry. The same thing is

may be added baron Haller's poem on *Reason, Superstition,* and *Infidelity,* before mentioned, and which is worthy of its illustrious author; *Die Natur,* the *Anti-Ovid,* and the *Musarion,* of Wieland, which have been much commended; and the various didactic poems of Hagedorn, Gieseke, Kastner, Uz, and Dusch, also Germans, which have been spoken of by the critics of their own country with high respect.

SECTION III.

MORAL AND DEVOTIONAL POETRY.

The moral poetry of the eighteenth century may without hesitation be pronounced superior, in the union of correctness, purity, and elegance, to that of any preceding age. This superiority is so remarkable, that it must arrest the attention of the most careless observer, and give pleasure to every friend of human happiness. The age,

alluded to by the abbé Delille, in the preliminary discourse prefixed to his translation of the *Georgics.* 'A translation,' says he, 'of this poem, if it had been undertaken by an author of genius, would have been better calculated than any other work for adding to the riches of our language. A version of the *Æneid* itself, however well executed, would, in this respect, be of less utility; inasmuch as the genius of our tongue accommodates itself more easily to the description of heroic achievements, than to the details of natural phenomena, and of the operations of husbandry. To force it to express these with suitable dignity, would have been a real conquest over that false delicacy which it has contracted from our unfortunate prejudices."—Stewart's *Elements of the Philosophy of Mind,* Part II, chap. v, § 2, second edit.

it is readily admitted, gave birth to much licentious poetry; but it produced, at the same time, much that exhibits a degree of purity and elevation of sentiment to which the history of literature furnishes no parallel.

The *Night Thoughts*, and the *Universal Passion*, by Dr. Young, are entitled to the first place in this list *. In these works the celebrated author has employed wonderful sublimity and force of imagination, eloquence and cogency of reasoning, and music of numbers, in conveying the most important truths that can engage the attention of mankind. The *Ethical Epistles* and some other moral productions of Pope, are models in their kind which have never been excelled. *The Vanity of Human Wishes*, a poem in imitation of the tenth satire of Juvenal, by Dr. Johnson, has been pronounced as high an effort of ethic poetry as any language can show. *The Task*, by Mr. Cowper †, is one of the signal honours of the age, in this class of poetic compositions. For purity of sentiment, chasteness of description, simplicity and energy of style, and a vein of original and well-directed satire, this work will be admired as long as taste and virtue exist.

The eighteenth century is also distinguished

* The reverend Edward Young was born in 1681. *The Last Day*, his first poetical work of much distinction, was published in 1704. His *Night Thoughts* were published about the year 1740. He died in 1765.

† William Cowper was born in 1731. He was not only one of the greatest poets, but also one of the most pious, amiable, and benevolent men, of the age. An interesting account of his life and writings has been given by his friend, and contemporary poet, Mr. Hayley. He died in 1800.

by the *Devotional* poetry which it produced. The difficulty of this species of composition has been found and acknowledged, at all periods in which it was undertaken. Before the commencement of the age under consideration, theological doctrines, and portions of sacred history, had been made the subject of poetry, by a number of distinguished writers. Versions of the *Psalms* had been particularly attempted by several persons with tolerable success. Among these the version of Brady and Tate held the first place in the English language. Indeed some parts of their work were so well performed, that, comparatively, few of their successors have attained equal excellence.

But among all the sacred poetry of the eighteenth century, that of Dr. Watts stands preeminent. His plan of evangelising the Psalms of David, and accommodating them to the worship of God under the present dispensation, as it was equally new and ingenious, so it has received an unusual degree of approbation, and has perhaps been more useful than any other work in this department of composition that was ever presented to the world. Simplicity, smoothness, harmony, and pious elevation, remarkably characterise his verse. Next to the sacred poetry of Dr. Watts, the specimens produced by Mr. Addison, Dr. Doddridge, Mr. Pitt, Mr. Merrick, Dr. Blacklock, Mr. Logan, and several others, possess a high degree of merit. To these, the immortal name of Cowper ought to be added, as holding a place in the first rank. The orthodoxy of his faith, and the fervour of his piety, joined to his great talents, fitted him preeminently for this species of composition.

Poetical versions of the Psalms made, during this period, on the continent of Europe, were numerous; but of these a very small portion are worthy of notice. The *Hymns* of Gellert, a celebrated poet of Germany, are said to be entitled to a place in the first class of this kind of writings. The *Hymns* of Kleist, Cramer, Klopstock, Schlegel, and Herder, of the same country, have also received high praise among persons of piety and taste.

SECTION IV.

SATIRICAL POETRY.

In this department of poetry the eighteenth century is, on the whole, superior to any preceding age. Two satirical poets of great eminence had flourished in Europe toward the close of the preceding age. Boileau and Dryden, equal in most respects to the great Roman satirists, and in some superior to them all, brought modern satire to a very high degree of excellence. Dryden was the first who displayed with success the power of the English language in this kind of composition. In the eighteenth century the candidates for satirical fame were numerous; and in variety of manner, correctness of taste, purity of virtue, and, in some instances, in wit, humour, and force of ridicule, may be said to have exceeded all their predecessors.

In this list Mr. Pope is entitled to the first place. His *Satirical Epistles*, his *Imitations* of

the ancient satirists, his *Dunciad**, and several other performances of a similar kind, have been long admired. In keenness of satire, energy of description, condensation of thought, and vivacity and correctness of style, he is perhaps superior to all who went before him: and though the moral tendency of some of his pictures may be questioned, yet he lashes vice with great force and effect†. The *Love of Fame the Universal*

* Some of the images in the *Dunciad* are very gross and disgusting. Pope had too much of that fondness for impure ideas which was so conspicuous, and carried so much further, in the writings of Swift.

† The author of the *Pursuits of Literature* thus speaks of this great poet: "The sixth and last of this immortal brotherhood, (the Satirists) in the fulness of time, and in the maturity of poetical power, came Pope. All that was wanting to his illustrious predecessor found its consummation in the genius, knowledge, correct sense, and condensation of thought and expression, which distinguished this poet. The tenour of his life was peculiarly favourable to his office. He had *first* cultivated all the flowery grounds of poetry. He had excelled in description, in pastoral, in the pathetic, and in general criticism; and had given an English existence in perpetuity to the father of all poetry. Thus honoured, and with these pretensions, he left them all for that excellence, for which the maturity of his talents and judgement so eminently designed him. Familiar with the great; intimate with the polite; graced by the attentions of *the fair*; admired by the learned; a favourite with the nation; independent in an acquired opulence, the honourable product of his genius and industry; the companion of persons distinguished for birth, high fashion, rank, wit, or virtue; resident in the centre of all public information and intelligence; every avenue to knowledge and every mode of observation were open to his curious, prying, piercing, and unwearied intellect. His works are so generally read and studied, that I should not merely fatigue, but I should almost insult you by such a needless disquisition."

Passion, by Dr. Young, though mentioned under a preceding head, is also entitled to a place among the best satirical productions of the age. The characters are, in general, well selected and ably drawn, the illustrations are happy, the sentiments just, the imagery correct and various, and the satire at once easy, vivacious, and moral.

The satirical poetry of dean Swift has various kinds and a high degree of poetic excellence; but *delicacy* is by no means one of its attributes. His wit is often extremely happy, and his ridicule just, lively, and powerful. "His diction is correct, his numbers smooth, and his rhymes exact. There seldom occurs a laboured expression, or a redundant epithet. All his verses exemplify his own definition of a good style; they consist of *proper words in proper places.*" But the levity with which he frequently treats the most serious subjects is altogether unpardonable*; and the

* "I know not," says Dr. Beattie, "whether this author is not the only human being who ever presumed to speak in ludicrous terms of the last judgement. His profane verses on that tremendous subject were not published, so far as I know, till after his death: for Chesterfield's letter to Voltaire, in which they are inserted, and spoken of with approbation (which is no more than one should expect from such a critic), and said to be copied from the original in Swift's hand-writing, is dated in 1752. But this is no excuse for the author. We can guess at what was in his mind when he wrote them; and at what remained in his mind while he could have destroyed them, and would not. I mean not to insinuate that Swift was favourable to infidelity. There is good reason to believe he was not; and that, though many of his levities are inexcusable, he could occasionally be both serious and pious. In fact, an infidel clergyman would be such a compound of execrable impiety, and contemptible meanness, that I am unwilling to suppose there can be such a monster. The pro-

unnatural fondness which he manifests for coarse indelicacy, and for images drawn from every source of physical impurity, cannot but fill with disgust the mind of every virtuous reader *.

The satires of Churchill display great vigour both of thought and language; and though the boldness of their abuse, and the nature of their subjects, were, in some measure, the ground of their popularity, while the author lived; yet they have certainly great strength, and possess no inconsiderable merit in their way. Vicious as was the character of the man, he knew how to expose and correct vice. The *Rosciad*, and the *Prophecy of Famine*, may be regarded as the best of his poems. *London*, a poem in imitation of the third satire of Juvenal, by Dr. Johnson, was one of the early displays of that genius which afterwards shone with such distinguished lustre, and filled so large a space in the literature of the age. The *Faust*, of the celebrated Goethe, of Germany, occupies a high place in the list of modern satirical writings. The *Table Talk*, the *Progress of Errour*, and some other satirical pieces, by Cowper, in purity, humour, dignity, and force, have seldom been exceeded in any language. The *Baviad* and *Mæviad* of Mr. Gifford have received much applause from some of the critics of

faneness of this author I impute to his passion for ridicule, and rage of witticism; which, when they settle into a habit, and venture on liberties with what is sacred, never fail to pervert the mind, and harden the heart."

* Instances of this fault are so numerous and offensive in Swift's writings, that no further remarks are necessary either to explain or enforce the criticism.

Great Britain. To these may be added *The Pursuits of Literature*, a satirical poem, published a few years ago, by an anonymous hand. In this work every friend of truth, virtue, and sound learning will find much to approve and admire. A large portion of the literary and moral opinions which it contains are doubtless entitled to the warmest approbation. But the judicious reader will also find much to condemn. The author discovers, on many occasions, a bitterness of prejudice, and a rage for satire, which frequently lead him astray, and which detract greatly both from the dignity and the value of his work. His pedantic fondness for quotation is indulged to a degree which disfigures his pages, and encumbers and weakens his meaning; and, after all, his notes are so much more spirited and valuable than his poetry, that the latter will seldom be read except as an introduction to the former *.

Under the head of *Satire* falls that *mock-heroic* poetry, which is a species of composition almost wholly peculiar to modern times, and of which the

* The author of this singular work is still unknown. That he has great learning, and a comprehensive and vigorous mind, cannot be doubted; and that in *prose* he expresses himself with much force, vivacity, and taste, is no less evident. But I must be permitted, on many subjects, to call in question both the candour of his temper, and the rectitude of his judgement; and as a poet, notwithstanding all the applause which has been heaped upon him, I must consider him far below the great masters among whom he affects to take his station, and with whom he has the presumption to compare himself. His work is one of those which derive their chief importance and popularity from the praise and aspersion of *living* characters with which they abound; and which, in a few years, must fall into oblivion.

last age has been abundantly prolific. Of this kind of poetry *The Rape of the Lock*, by Pope, is a specimen of first-rate excellence. In this work, novelty of imagery, fertility of invention, felicity of wit, and sweetness of versification, are combined in an exquisite degree. The *Triumphs of Temper*, by Mr. Hayley, may be considered as belonging to the same class: and though far from being equal to the immortal production of Pope, it displays a degree of genius, taste, and humour, highly honourable to the author.

The greater part of the poetry of a certain British satirist, who calls himself Peter Pindar, also belongs to this class. His writings abound in humour, which, though frequently gross, indicates talents of no common rank; and in wit, which, though generally eccentric, and frequently devoted to the worst purposes, manifests extent of learning and force of imagination. Aware that quaint phrases, whimsical allusions, and laughable conceits, when presented unmixed, will soon cease to please, he has taken care to infuse into many of his pieces a considerable portion of sentiment and tenderness, and sometimes to elevate his reader by an unexpected stroke of the sublime *.

Since the days of Butler many specimens of that *burlesque* poetry adopted by him in his *Hu-*

* The real name of this writer is Wolcot. While justice is done to his talents, which, in a certain line, are really great, his faults and vices ought not to pass without censure. His blasphemous impiety cannot be viewed by the Christian without abhorrence; while the injustice and malignity displayed against private character, in many of his writings, must be regarded with cordial detestation by every honest man.

dibras have been given to the public; but few of them are entitled to the praise of high excellence. Probably the most successful imitations of the *Hudibrastic* manner are to be found in the *Alma* of Prior, and the *M'Fingal* of Mr. Trumbull, a respectable American poet. The merit of the former is so great, that Mr. Pope, with all his poetic fame, expressed a wish to have been the author of it; and the latter has been pronounced, by good judges, both in Europe and America, to be nearly equal to its great model.

M. Gressett, a French poet of high reputation, has shown, in his *Vert-Vert*, and in his *Chartreuse*, that between the *heroic* and the *burlesque* there is still another species of poetry, partaking in some degree of the characters of both: a kind of composition which, while it displays some of the attributes of moral and serious poetry, at the same time embraces the features of the satiric, the gay, and the refined comic, in a very pleasing degree.

About fifty years before the commencement of the century under review began the fashion of imitating the great satirists of Rome, or adapting ancient poetry to modern characters and manners. This kind of poetical exercise has continued in vogue to the present day, and the number of those who have made trial of their genius in this way has greatly increased. Of this imitation the satires of Horace, Juvenal, and Persius, have all been the objects. And among these imitators are found the names of Pope, Johnson, Gifford, Lewis, and several other British poets.

SECTION V.

DESCRIPTIVE POETRY.

In *Descriptive* poetry the last age may lay claim to the character of distinguished excellence. It not only produced more in *quantity*, but also much of a superior *quality* to that of which any preceding period can boast. The tale of *The Hermit*, by Dr. Parnell, deserves high praise for justness of sentiment, and delicacy and liveliness of colouring. The *Windsor Forest* of Pope also belongs to the same class; and for variety and elegance of description, and particularly for a happy interchange of the descriptive, the narrative, and the moral, possesses great merit. But the work entitled to the highest place in this department of poetry, is the *Seasons*, by Thomson *. This writer may be said to have created a new species of poetry. "His mode of thinking and of expressing his thoughts is original. His blank verse is not the blank verse of Milton, or of any preceding poet. His numbers, his pauses, his diction, are of his own growth, without transcription, without imitation. He thinks in a peculiar strain; and he thinks always as a man of genius. He looks round on nature and life with the eye which nature be-

* James Thomson was born in 1700, and received his education at the university of Edinburgh. His *Winter* was published about the year 1726; his *Summer* in 1727; his *Spring* in 1728; and his *Autumn* in 1730. This illustrious poet died in 1748.

stows only on a poet; the eye that distinguishes in every thing presented to its view, whatever there is on, which imagination can delight to be detained; and with a mind that at once comprehends the vast, and attends to the minute. He leads us through the appearances of things as they are successively varied by the vicissitudes of the year; and imparts to us so much of his own enthusiasm, that our thoughts expand with his imagery, and kindle with his sentiments *."

Kleist, of Germany, in the same department of poetic composition, has been compared with Thomson, and is said, by some of his countrymen, to have attained nearly equal excellence. His *Frühling* exhibits some of the most charming scenes in nature, in just, vivid, and beautiful colours. A similar comparison has also been made between the immortal British bard and Delille of France, who, in his *L'Homme des Champs*, or *Rural Philosopher*, presented his countrymen with a poem of acknowledged merit. Though in this work, as well as in that which was before mentioned by the same author, there is but little display of invention; yet, for correctness and elegance of versification, it sustains a very high character. The *Alpen* of baron Haller is a descriptive poem of much merit. To which may be added the *Luise* of Voss, and the *Hermann und Dorothea* † of Goethe, which have a high reputation in Germany.

The *Traveller*, and the *Deserted Village*, by

* *Life of* Thomson, by Johnson.

† This has been translated into English by Mr. Holcroft.

Goldsmith, are so well known, and have been so generally admired, that a formal and detailed account of their beauties is altogether unnecessary. His versification has been pronounced more sweet and harmonious than that of any other poet; and both his sentiments and imagery display excellence of the first order. The *Wanderer*, by Savage, discovers a large portion of those various and extraordinary powers which distinguished that unfortunate and degraded man*. It teems with beautiful imagery, with "strong descriptions of nature, and just observations on life." The *Shipwreck*, by Falconer †, is well known, and has been universally esteemed, as abounding with the richest beauties. Scarcely, if at all, inferior, in descriptive excellence, to any that have been mentioned, are some of the poems of Robert Burns, the Ayrshire bard ‡. Though his versification is frequently faulty, yet, for ease and vigour of lan-

* It is generally known that this extraordinary man was the son of Anne, countess of Macclesfield, by an adulterous connexion with earl Rivers. His great talents, the unnatural cruelty of his mother, his degrading vices, his accumulated distresses, and his melancholy end, have been so often the subject of mingled astonishment and regret, that to attempt to describe them is as unnecessary as it would be unpleasant. He was born in 1698, and died in 1743, one of the most remarkable instances of unfortunate genius that the age produced.

† William Falconer was a native of Scotland. His *Shipwreck* was published about the year 1762. He was a seaman by profession; and going out in 1769 in the Aurora frigate, was never heard of afterward.

‡ Robert Burns was born in Ayrshire, in 1758. He first became celebrated as a poet about the year 1787, and died miserably at Dumfries in 1796. See Dr. Currie's very interesting *Life* of this poet.

guage, for strong descriptive powers, and a vein of rich and exquisite humour, his productions have few rivals. None can read the works of this justly celebrated writer without admiring the genius which, amidst so many difficulties and discouragements, could soar so high; nor without lamenting the misfortunes and the vices which, with such a genius, and amidst so many excitements to virtue, could sink him so low.

Walks in a Forest, and the *Vales of Wever*, by Mr. Gisborne, display a very honourable share of original and strong descriptive powers. *A Tour through Wales*, by Mr. Sotheby; *Grove-Hill*, by Mr. Maurice; *The Sea*, by Mr. Bidlake; *The Pleasures of Memory*, by Mr. Rogers; and the *Pleasures of Hope*, by Mr. Campbell; are all considered by critics as possessing rich and various poetic beauties. The *Farmer's Boy*, by Robert Bloomfield, to ease and sweetness of versification adds descriptions of such original and inimitable excellence, as shows that they were drawn from nature; and it possesses likewise a vein of sentiment and morality of the most elevated kind.

SECTION VI.

PASTORAL POETRY.

The *Pastoral* poetry of the eighteenth century is also highly honourable to modern genius. A brief review of the principal names which belong to this class of authors will show that the last, with

respect to this kind of poetic excellence, may be advantageously compared with any former age.

The pastorals of Pope, though not equal to most of his other works, have yet considerable merit to recommend them. The pastorals of Phillips, published about the same time, may be considered as occupying nearly the same rank of excellence. In the works of Gay and Shenstone are also found some specimens of this kind of composition, which have generally a place assigned them among the pastorals of superior character. The *Shepherd's Week* of the former, and the *Pastoral Ballad* of the latter, are considered among the most meritorious performances of their kind in our language. The *Despairing Shepherd* of Rowe is also worthy of high praise; and the various pastoral productions of Collins *, in richness and strength of description, in justness and simplicity of sentiment, have rarely been excelled. But inferior to none that have been mentioned is the *Gentle Shepherd* of Allan Ramsay †, a work of great and original genius, in which a happy delineation of character, an affecting exhibition of incidents, and a captivating simplicity and tenderness, remarkably prevail.

But among all the pastoral poetry of the eighteenth century, the *Idylls* of Gesner ‡ unque-

* William Collins was born at Chichester in 1720, where he died in 1756.

† Allan Ramsay was born in Scotland in 1696, and served an apprenticeship to a barber in Edinburgh. The *Gentle Shepherd* is his greatest work. He died in 1763.

‡ Solomon Gesner was born at Zurich in 1730. He was a bookseller, a member of the senate of Zurich, and excelled in

stionably hold the first place. He has, indeed, been pronounced the greatest pastoral poet that ever lived, not excepting Theocritus himself, the father of this species of poetry. In the novelty of many of his thoughts, in the judicious choice of subjects, in liveliness of description, and in exquisite pathos and tenderness of sentiment, he is without a rival. The *Idylls*, or *Rural Stories*, of mademoiselle Levesque, a poetess of France, are said by some critics to approach that excellence which distinguishes the productions of Gesner. To these may be added the *Eclogues* of Fontenelle and de la Motte, of the same country, which deserve to be mentioned with honour among the pastoral writings of the age.

The late pastoral poets of Great Britain are numerous; but of these few are worthy of being distinguished. Among such as deserve to be mentioned with particular honour, Dr. Beattie and Mr. Southey stand in the first rank. The *Hermit* of the former, which belongs to this class rather than any other, in ease, in solemn musical expression, in elevation of sentiment, and in pathetic touches, is almost unrivalled, and would be sufficient alone to establish the author's immortality as a poet *: and the *Old Mansion-House*, the *Ruined Cottage*, and the *Botany-Bay Eclogues* of the latter, display the fine imagination, the graceful simpli-

landscape painting as well as in poetry. He wrote much beside his *Death of Abel*, and his *Idylls*. He died in 1788.

* This excellent man and charming poet was born in 1735, and died in 1803. His memory will be affectionately and respectfully cherished as long as religion, virtue, and taste, exist.

city, and the general poetic excellence, for which the author is remarkable.

In pastoral song and ballad, the poets of the last age incontestably excelled those of all preceding centuries. In this class of poetic compositions Great Britain has been particularly fruitful; and few names deserve to be mentioned with so much honour as that of Robert Burns, who was noticed in a former section. In the happy union of ease, simplicity, humour, pathos, and energy, he has had few equals in any age.

SECTION VII.

LYRIC POETRY.

The last age produced some specimens of lyric poetry which deserve the highest praise. It has been asserted indeed, that, in this species of composition, modern poets are universally and indisputably inferior to the ancient; but this assertion is made too hastily, and without sufficient qualification. Some of the odes of Collins and of Gray will bear an honourable comparison with the best productions of this kind of any age. Beside these, the lyric compositions of Watts, Thomson, Lyttleton, Mason, Warton, Cowper, Mrs. Barbauld, Coleridge, and several other English poets, will long do honour to the literature of their country.

During the same period, much lyric poetry of a respectable character was produced on the continent of Europe. In the French language, the

odes of J. B. Rousseau, and of Gressett, are considered by the critics of that country as among the most finished productions of their kind. To the odes of Rousseau this character is especially applicable. In the Italian language, the odes of Metastasio *; in the German, those of Klopstock, Weisse, and Wieland; and in the Swedish, those of Dahlin, and of Gyllenborg, are all admired among those who understand the languages in which they are respectively written. But it is believed that the best lyric poetry of Great Britain, during this period, exceeds that of any other country in Europe, and of course in the literary world.

Under the head of lyric poetry may be placed the species of composition called the *Sonnet*, with many excellent models of which the eighteenth century has remarkably abounded. This kind of poetry is of Italian origin. Dante, though not the inventor, was the first who succeeded in the composition of it. The first successful attempts to present the Sonnet in our language were made by Drummond, and afterward by Milton. The former excelled in delicacy; the specimens furnished by the latter were chiefly distinguished by strength of expression, and sublimity of thought, but were by no means remarkable for smoothness, harmony, or elegance. In these respects, several writers of Sonnets, since the day of that immortal bard, though greatly inferior in genius, have much excelled him; and of course have produced

* Pietro Metastasio was born at Rome, of poor parents, in 1678. His poems procured him the gift of nobility. He died at Vienna in 1782.

compositions of this kind before unequalled in English literature. Among those who have most distinguished themselves in this department of poetry are Charlotte Smith, Mr. Bowles, and miss Seward. "In sweetness and harmony of versification, in unaffected elegance of style, and in that pleasing melancholy which irresistibly steals upon and captivates the heart, they have excelled all other writers of the Sonnet, and have shown how erroneous are the opinions of those who deem this species of composition beneath the attention of genius *."

Finally, under the general denomination of lyric poetry fall those various species of poetic compositions called *Songs*, *Ballads*, &c., of which the last age has been eminently fruitful. Never was there a period before in which the number and the poetic merit of these were so great as during that which is under review. In this department of poetry the *Scotch* and *English* have excelled not only their contemporaries, but all preceding writers. But this class of poets is so numerous, and so familiarly known, that no attempt will be made to exhibit even a selection of the best.

* Drake's *Literary Hours*, vol. i, p. 115.

SECTION VIII.

ELEGIAC POETRY.

That part of the poetry of the eighteenth century which falls under this head is worthy of particular notice. It may be pronounced greatly superior to all the productions of a similar kind which belong to any preceding age. In this section several of the productions of Pope may be with propriety arranged, and must have assigned to them a high place. The elegies of Hammond, though scarcely possessing first-rate excellence, have been also celebrated. But the writer who confessedly stands in the first rank of elegiac poets is Gray. His *Elegy in a Country Churchyard* will be read with admiration and delight, as possessing beauties of the most rich and exquisite kind, as long as taste and sensibility shall exist *.

* Thomas Gray was born in London in 1716, and died in 1771. His character, as drawn by a friend, is as follows: "Perhaps he was the most learned man in Europe. He was equally acquainted with the elegant, and the profound parts of science; and that not superficially, but thoroughly. He knew every branch of history, both natural and civil; had read all the original historians of England, France, and Italy; and was a great antiquarian. Criticism, metaphysics, morals, politics, made a principal part of his study. Voyages and travels of all sorts were his favourite amusements; and he had a fine taste in painting, prints, architecture, and gardening. With such a fund of knowledge, his conversation must have been equally instructing and entertaining; but he was also a good man, a man of virtue and

Another distinguished name, entitled to an honourable place in this list, is that of Shenstone *, who produced at least one Elegy which will ever command admiration. Nor would it be just to pass in silence the name of miss Seward, who, in this department of poetry, has displayed powers in the pathetic, the elegant, and the beautiful, which bid fair long to render her character conspicuous in the annals of English literature.

The best elegiac poetry of the last age is distinguished above that of all preceding periods, by the union of a number of qualities which never before so conspicuously met in this species of composition. These qualities are regularity, correctness, pathos, elevation of sentiment, and pu-

humanity." Dr. Johnson, in his Lives of the Poets, is generally supposed not to have done justice to this celebrated writer. From his *Elegy in the Churchyard*, indeed, that great critic could not withhold the warmest praise. "In the character of this *Elegy*," says he, "I rejoice to concur with the common reader. It abounds with images which find a mirror in every mind, and with sentiments to which every bosom returns an echo. Had Gray written often thus, it had been vain to blame, and useless to praise him." After all, it must be acknowledged that he wrote but little; that only a part of that little is in the style of exquisite excellence; and that his *Elegy* is so greatly superior to every other production of his pen, as to excite a suspicion that it was the result of unwearied polish and elaboration, rather than the spontaneous effusion of a mighty genius. If this view of the subject be admissible, though Gray will still hold a place in the first rank of lyric and elegiac poets; yet some of the praise which has been bestowed on his genius will be pronounced excessive, and the judgement of Dr. Johnson less liable to exception than is commonly supposed.

* William Shenstone was born in Shropshire in 1714, and died unmarried in 1763. His works were afterwards collected and published in 3 vols. 8vo.

rity of moral character. Never before were these characters so frequently assembled, so harmoniously united, or so forcibly exhibited, as in some of the elegiac productions of the century under review.

SECTION IX.

DRAMA.

The *Dramatic Poetry* of the eighteenth century bears, in several respects, a distinguished character *. An obvious circumstance, which deserves to be noted, is the great and unprecedented *number* of dramatic productions that have appeared during this period. In almost every civilised and literary nation the press has teemed with the efforts of the tragic and comic muses. Perhaps in no department of literature, if we except Novels, has the taste of the age for multiplying books been more remarkably displayed than in that which is under consideration. In proportion as theatrical amusements have been multiplied and extended, the love of fame, the hope of profit, or a fondness for the employment, have prompted many to appear as candidates for supplying the demands of the public. Of the moral effect of

* The author is sensible that many dramatic productions cannot with propriety be denominated *poetic;* but, to avoid multiplying chapters, he has thought proper to throw under one head all those works, whether poetic or not, which belong to the dramatic class.

this increase in the taste and demand for theatrical representations some notice will be taken hereafter.

Though the specimens of *English Tragedy*, which belong to the period under review, are numerous, yet few of them are entitled to the praise of first-rate excellence. After the *Mourning Bride* of Congreve, which properly belongs to the preceding age, the *Fair Penitent*, and the *Jane Shore*, of Rowe *, with respect to time, hold the first place. These, though of different relative merit, yet, both on account of their plot and language, have deservedly continued to be favourites to the present day †. If Rowe paint the passions with less force and conformity to nature than Shakspeare and Otway, he is free from the barbarisms of the former, and the licentiousness of the latter. The *Cato* of Addison is generally known; and the public seem now to be agreed in the opinion, that, notwithstanding all the loftiness of sentiment and beauty of diction with which it abounds, as a

* Nicholas Rowe was born in Bedfordshire in 1673. He held several places under government, and upon the accession of George I was made poet-laureat. He died in 1718. His best productions are his translation of *Lucan*, and the two *Tragedies* abovementioned.

† In these and the following remarks on *dramatic* poetry, the author takes for granted, that no reader will consider him as expressing an opinion favourable to theatrical amusements. He is persuaded, that the general character and tendency of such amusements are highly immoral; but in this place, and always when he employs favourable expressions concerning certain dramas, he begs to be understood as merely delivering opinions of a literary kind.

tragedy it is too "regularly dull," and unnaturally stiff, for scenic representation. The *Revenge*, by Dr. Young, displays no small share of that sublimity and fire which the illustrious author so remarkably possessed. Of his several tragedies, this only keeps possession of the stage. The *Gamester* of Moore will long remain a very honourable monument of the dramatic powers of its author. The *Elfrida* and *Caractacus* of Mason * would have done credit to the most favourable periods of ancient literature. *Douglas*, by Mr. Home, for several reasons attracted an unusual degree of public attention, when it first appeared; and has ever since maintained a high character †. Among the tragedies of Thomson *Tancred and Sigismunda* alone merits distinction. This, with regard to plot, sentiment, and style, is entitled to high respect; but perhaps scarcely to that degree which might have been expected from the great powers displayed in the *Seasons*. The *Irene* of Dr. Johnson, though it "furnishes a rich store of noble sentiments, fine imagery, and beautiful language, is deficient in plan, pathos, and general

* The reverend William Mason was a native of Yorkshire. He published his first poem in 1748, took orders in 1754, and died in 1797.

† Mr. Home was a clergyman of the church of Scotland. The circumstance of a person of his profession giving encouragement to the stage, by writing for it, gave great and just offence, and made his tragedy an object of much more attention and interest than it would otherwise have been. He wrote several tragedies afterward; but they were all unsuccessful. It seemed as if his genius had been absorbed by his first production.

impression." The *Mysterious Mother* of Horace Walpole*, though the subject is shocking, displays great talents, especially in depicting the terrible. Miss Hannah More's *Percy* is a popular tragic production †. Her *Fatal Falsehood* also indicates those talents which appear in most of her writings. Her *Sacred Dramas*, though a monument of her piety, and her desire to promote youthful improvement, will scarcely be thought to deserve high praise as works of genius. To these may be added the *Zenobia*, the *Grecian Daughter*, and the *Alzuma*, of Mr. Murphy, which are considered as respectable in their dramatic character, and pure in their moral tendency, but with a remarkable prevalence of terrour in their impression.

The close of the century was distinguished by the dramatic publications of miss Joanna Baillie, who is considered by many as having retrieved the declining character of the age with respect to tragic composition. A respectable critic has pronounced, that, "for lofty poetry, sublime sentiment, and true pathos, her tragedies stand unquestionably at the head of every modern effort of the tragic muse."

In the history of English *Comedy*, the eighteenth century forms an important era. Indeed, the En-

* Horace Walpole, the youngest son of sir Robert Walpole, was born in 1717. He succeeded to the title and estate of the *earl of Orford* in 1791, and died in 1797.

† *Percy* is said to be a "bad alteration from *Gabrielle de Vergy*, by du Belloy, a celebrated French tragedian." Notwithstanding this charge, however, it has maintained a high degree of popularity.

glish language scarcely furnished an instance of pure or unmixed comedy prior to the commencement of this period. The comic productions of Shakspeare are well known not to have been of this kind; and those of Dryden and Southern were generally interspersed with too much of the tragic to have a place assigned them in the department of ridicule alone. In the last age a remarkable revolution has taken place in this respect. Specimens of unmixed comedy have become frequent, or rather the most fashionable kind of dramatic composition; and in a few instances the wit and humour of these productions are found more correct and refined, and their whole structure more elegant, than those of any preceding age.

The English *Comedies* which have attracted attention, and to which great excellence is attributed, are numerous. The *Careless Husband* of Cibber, first performed in 1704, is generally ranked among the most respectable of this class, though it can scarcely be said to be perfectly pure in its moral tendency. The *Recruiting Officer*, and the *Beaux Stratagem*, by Farquhar *, though liable to still greater blame, for the same kind of fault, have long been popular plays. The *Conscious Lovers* of sir Richard Steele †, for purity and tenderness of sentiment, and chasteness of

* Towards the close of the eighteenth century, the plays of Farquhar, on account of their licentious character, were seldom played, and never without great alterations. They are wholly discontinued on the American stage.

† Sir Richard Steele was born in Dublin. Soon after the accession of George I he was knighted, and became a member of parliament. He died in 1729.

language, has generally received warm commendation. The *Suspicious Husband*, by Hoadley *, also ranks high in this list. The *Jealous Wife*, and the *Clandestine Marriage*, by Colman, have had a degree of popularity much beyond ordinary comic productions. The *Good-natured Man*, and *She Stoops to Conquer*, by Goldsmith, have generally a place assigned them among the superior works of this class. The *School for Scandal*, by Mr. Sheridan, is pronounced, in a literary view, the best comedy of the age; but when measured by a correct moral standard, considerable deduction must be made from its merit. Two other comic productions of Mr. Sheridan have been celebrated; viz. *The Rivals*, and *The Critic*. Both these works, and especially the latter, are considered as doing honour to the fertile genius of the author. The *West Indian*, and the *Wheel of Fortune*, by Mr. Cumberland, have been much applauded by judges of dramatic excellence. The comic productions of Garrick, though certainly not deserving of a place in the highest rank, are yet lively and pleasing, and in general free from the charge of immoral tendency. The *Heiress* of general Burgoyne, for taste and wit stands high in the opinion of connoisseurs. The comedies of Mr. Holcroft are entitled to considerable praise, as efforts of genius; but the errours of the author's moral and philosophical principles are

* Benjamin Hoadley, the eldest son of the celebrated bishop of that name, was born in 1705. He was bred to the medical profession. In 1742 he was appointed physician to the king's household; and died in 1757.

too often brought into view. In strong and popular exhibitions of the *vis comica*, Mr. Macklin displayed unusual talents. For the construction of musical *Afterpieces*, of delicate and sentimental humour, Mr. Dibdin rendered himself famous. In *Farce*, few writers of the age discovered more broad humour than Foote; but his humour is generally coarse, frequently licentious, and in some instances so grossly impious and immoral, as to disgrace the author in the estimation of every virtuous mind. For taste and wit the dramatic productions of Mrs. Cowley and Mrs. Inchbald deserve to be honourably mentioned. In elegant comedy, miss Lee has displayed very respectable powers. But it would far exceed our limits to give a full catalogue of those who have sought and received high dramatic honours in the course of the age under consideration.

The younger Colman is entitled to a place among the distinguished comic writers of Great Britain at the close of the century under consideration. He is said, by some, to be inferior only to Mr. Sheridan. His *Ways and Means*, his *Surrender of Calais*, his comic opera of *Inkle and Yarico*, and several other dramas, have commanded much popular applause. Some of his dramatic pieces, however, are said to be tinctured with mischievous principles, and to have an immoral tendency; but of the nature and extent of these faults the author has too little knowledge to be able to speak precisely.

The various dramatic works of O'Keefe, Kelly, Morton, Reynolds, and several others, are well known to those who have a tolerable acquaintance

with the English drama, and have attained various degrees of respect in the public estimation.

That kind of dramatic composition which is set to music, and is denominated an *Opera*, is well known to be a modern invention. This species of theatrical exhibition was first made in Italy about the beginning of the seventeenth century; but it was never introduced into England till the beginning of the eighteenth: and in order to avoid the absurdity of dramas in an unknown tongue (for the first operas performed in Britain were in the Italian language), Mr. Addison wrote and published his *Rosamond*. Since that time operas have become more popular in almost every part of Europe, and generally find a place where the theatre is supported. The operas of Fontenelle, of Metastasio, and of other celebrated dramatic writers, are well known. But they are, after all, a kind of composition too unnatural to hold a very high place in the list of dramatic amusements. The first *serious* operas were brought on the English stage by Dr. Arne, who translated some of the operas of Metastasio; but this kind of theatrical exhibition gained little ground. The first musical piece which commanded any great success on the English stage was the *Beggar's Opera* of Gay. Since his time the *comic* opera has been much more popular than the serious.

It would be a culpable omission to conclude our remarks on this department of British poetry without taking some notice of the unwearied labours of literary men, during the age under consideration, to illustrate the writings of Shakspeare, the great father of the English drama. For some

time after the publication of his works, they were, from the defective taste and negligence of the times, greatly corrupted by various transcribers and editors. The first attempt to remove these corruptions, and to present a correct edition to the public, was made by Mr. Rowe, in 1709, with considerable success. Some years afterward, Mr. Pope made his countrymen more fully acquainted than they had ever been before with the corrupt state of Shakspeare's text, and excited high expectations that a more complete reform of it would be effected by his labours. Neither his emendations nor his commentaries, however, are now considered as of much value. Indeed, he has been openly charged with corrupting, rather than purifying or elucidating, his author. His edition was published in 1725. Pope was followed, in this field for the display of literary taste and enterprise, by Mr. Theobald, who in 1733 gave a new edition; in preparing which for the press he collated many copies, and corrected many errours; but, defective both in taste and learning, he was still far from having done justice to his undertaking. The next in this list of critical editors is sir Thomas Hanmer, whose edition appeared in 1744. He made many emendations with great judgement, and in a manner which indicated both discernment and erudition; but in others he discovered much caprice; and adopted a large number of the censurable innovations of Pope. In 1747 Dr. Warburton made trial of his great critical acumen, and his profound erudition, on the works of the same illustrious dramatist; but though he displayed much sagacity and learning, his work

was considered rather as an exhibition of himself than an elucidation of his author. In 1765 appeared the edition of Dr. Johnson. This great critic threw more light on Shakspeare than all who had gone before him. His preface to the edition, his numerous emendations, and his notes on obscure passages, discover a soundness of judgement, a profundity of critical skill, and an elegance of taste, which will do him lasting honour. The editorial labours of Mr. Malone close the list. His edition appeared in 1789. Having devoted much time and pains to the work, and having the advantage of all that had been done by his predecessors, he may be considered, on the whole, the most complete commentator on Shakspeare that has hitherto appeared.

The dramatic productions of *France*, during the period under consideration, were numerous; and some of them attained, and still hold, a high reputation *. The first class of French *Tragedies* belonging to this age may be slighty noticed. In this list the first place is due to the several tragic productions of Voltaire. The *Zaire*, the *Alzire*, the *Merope*, and the *Orphan of China*, by him, are all possessed of distinguished excellence. It is peculiarly worthy of remark, that notwithstanding that celebrated infidel, in almost every page of his prose writings, discloses his hatred of religion, and the profligacy of his principles, nothing can be more pure, in a moral and religious view, than his tragedies. Next to those of Voltaire are the tragic compositions of the elder Crebillon,

* See la Harpe's *Lectures*, and his *Literary Correspondence*.

which are universally allowed to display great powers, and especially to excel in force of character. His *Rhadamistus* and *Atreus* are always quoted as his best performances. The tragedies of la Motte have also a place assigned them among the great dramatic productions of France during the last age. Of his several works, the *Ines de Castro* holds the highest rank. The historical and patriotic tragedies of Dubelloy are much celebrated in the annals of French literature. His *Siege of Calais* attained the greatest degree of celebrity; and afterwards his *Titus* and *Zelmira* commanded considerable attention. The tragedies of M. Saurin are also honourably mentioned among the critics of the author's own country. Of these, to his *Spartacus* the most liberal praise has been given. M. Diderot, among the numerous productions of his pen, gave to the public several tragedies; but they are, like many of his other writings, more conspicuous monuments of his moral depravity than of his genius or taste.

The French *Comedies* which have attracted attention are much more numerous. The comic productions of le Sage rank high in this list. His *Tuscaret* gained great and general popularity. *Le Glorieux*, and *Le Philosophe Marie*, of Destouches, were still more eminently popular. The former, indeed, has been pronounced one of the best comedies that the age produced. Piron was also a comic writer of great celebrity among his countrymen, and even throughout Europe. His *Metromanie* is an effort of high dramatic genius; but is liable to exception with respect to its moral tendency. The younger Crebillon dis-

plays, in his comedies, a large portion of wit and humour, but they are too much of the licentious kind. M. Saurin is also distinguished as a writer of French comedy. His *Anglomane* is considered as the best production of his pen, in this department of dramatic writing. The comedies of M. Gressett sustain a still higher character. The *Méchant*, by him, ranks with the first comic works of the age. M. Boissy has displayed considerable talents as a writer of comedy. *L'Homme du Jour*, and *Les dehors Trompeurs*, hold a respectable place in the critic's list. M. Beaumarchais is also entitled to notice as belonging to the same class. Though little can be said in favour of the moral tendency of his *Barbier de Seville*, *Mariage de Figaro*, and *Mère Coupable**; yet they discover so much wit and humour as to command much of the public attention.

To France is ascribed the invention of a new species of drama, called *Comédie Larmoyante*, or *Crying Comedy*. This is a genus between tragedy and comedy of the pure unmixed kind; and also different in its character from the tragi-comedy of Dryden and Southern. It offers pictures of temporary domestic distresses, which in private life too frequently occur, and which, though attended with no consequences sufficiently fatal for tragedy, are too serious for comic representation. The inventor of this species of drama was M. la Chaussée. In this style of writing he has had se-

* These three plays of Beaumarchais form one story; and in the last the crimes and follies of the characters are represented as punished.

veral imitators. The domestic and sentimental comedies of M. Dorat are considerably celebrated; and the moral dramas of Monval and Bouilly have also a high reputation.

Beside the French comic writers above mentioned, several others have attained distinction, though in an inferior degree. Among these, Regnard, la Motte, Marivaux, Marmontel, Sedaine, and Saint Foix, deserve particular notice. It is to be lamented that purity of moral character cannot be always ascribed to their productions.

Though the best English comedies of the eighteenth century are far superior to those of the same language which were produced in the preceding age, we cannot consider the same improvement as belonging to modern French comedy. Moliere, who died towards the close of the seventeenth century, in the combined excellences of wit, humour, plot, and character, has never been equalled by any of his successors. It may be questioned, indeed, whether he was ever equalled, in all these respects, by any writer, ancient or modern. His plays have supplied materials for plunder to all other comic writers since his time.

The dramatic works of *Italy*, during the period of this retrospect, were many in number, and some of them highly valued as efforts of genius *. In Italian *Tragedy*, the various works of Martelli, which appeared early in the century, hold an honourable place. His *Perselide*, *Ifigenia*, and *Alceste*, are generally enumerated among the best productions of his pen. To Martelli is ascribed

* See Walker's *Historical Memoir on Italian Tragedy*, 4to, 1799.

the honour of having adoped a structure of poetry which had never before been used in Italy. The tragedies of Marchesi have also a high character among the critics of that country. Those under the titles of *Crispo* and *Polissena* have particularly attained general celebrity. The *Merope* of Maffei is pronounced by some the best tragedy that was ever written. It is certain that few tragic productions have been more famed, or have served more frequently as models to subsequent writers*. Granelli and Bettinelli have also a place among the distinguished authors in this species of composition. The *Sedecia*, *Manasse*, and *Dione*, of the former; and the *Gionata*, *Demetrio*, and *Serse*, of the latter, are considered as their ablest productions. Monti, of the same country, has obtained considerable distinction by his *Manfredi* and *Aristodemo*. To these names may be added those of Cæsarotti and Alfieri, who have both produced tragedies of high reputation; and that of Metastasio, whose *Operas* and *Sacred Dramas* have been long and advantageously known to the public. He perfected the musical and serious drama of Italy. Rejecting marvellous incidents, and allegorical personages, his productions became more conformable to nature and life than those of his predecessors; and the music of his pieces was so introduced as to be performed by real actors, strongly agitated with passion, and of course giving more effect to their performance than could be done in the chorus of Greek tra-

* The *Merope* of Maffei is said to have been the model of Voltaire's tragedy of that name. It is asserted, also, that the work of Maffei is the real parent of Home's *Douglas*.

gedy, which was usually executed by calm observers instead of those who participated in the action of the scene.

Of the Italian writers of *Comedy* the author knows too little to attempt any distinct account. Few, if any, among them are more celebrated than Goldoni, the most voluminous dramatic writer of the eighteenth century. A large portion of the pieces exhibited on the Italian stage are from his pen. His comedies are so numerous that it would be difficult to make a selection, and of such acknowledged merit that they need no additional encomium *.

The dramatic writings of *Germany* first began in the eighteenth century to assume a respectable and interesting aspect. Indeed, till within the last forty years scarcely any thing had been produced, in this department of composition, which could be considered as doing honour to German genius, or which was much known beyond the bounds of that empire. But within this period some writers of high reputation have appeared, and raised the dramatic character of their country to great eminence.

Goethe stands among the most celebrated German dramatists. His *Sisters*, his *Stella*, and his *Iphigenia*, are considered as very honourable mo-

* Charles Goldoni was born at Venice in 1707, and died at Paris in 1792. He is said to have been equal to the greatest comic poets of modern times in dramatic talents, and superior to them all in the fertility of his genius. His works were printed at Leghorn in 1791, in 31 volumes 8vo. He has been generally called the Moliere of Italy; and Voltaire, in one of his letters to the marquis Albergati, styles him "the painter of Nature."

numents of genius. The tragedies of Lessing have a high character among his countrymen, particularly his *Emilia Galotti*, *Philotas*, and *Sarah Sampson*. The tragic productions of Babo are also much distinguished. The most remarkable of these are *Otto of Wittlesbach*, *Dagobert*, and *Conscience*. But perhaps no tragic writer of Germany has gained a reputation more extensive and commanding than Schiller, whose *Robbers* and *Don Carlos* evince powerful talents, and have gained unusual popularity. Beside these, Schlegel, Weisse, Leisewitz, von Reitzenstein, and Gerstenberg, have produced tragedies of high reputation. The tragedies of Klopstock are also represented as models of sublimity, in sentiment, language, and action. In comedy, Cruger, Klinger, Wetzel, Grossmann, Schroeder, Engel, and Iffland, are spoken of as having merit of a very conspicuous and popular kind. The last, in particular, is one of the most liberal contributors to the drama of modern times. Towards the close of the century, no dramatic writer in the German language was so generally popular as Kotzebue, whose principal works are so generally known, that an attempt to enumerate them, or draw their character, is altogether unnecessary *.

* Several of the dramas of Kotzebue, as well as those of Schiller, Goethe, and some other German writers, have been the subject of much criticism with respect to their moral tendency. It is impossible, in this place, to enter into a discussion of the merits of this inquiry. It is probable, however, that every sober and reflecting mind will perceive much to censure on this ground, particularly in the writings of the three popular dramatists above mentioned. It is not objected to these writers, that their charac-

The dramatic writers of the rest of Europe, during the age under consideration, were few; and of these few only a small portion gained any considerable celebrity. With the dramatists of Spain and Portugal the author has no acquaintance. In Sweden, the dramatic works of Dahlin, Gyllenborg, and Kellgren; in Denmark, those of baron Holberg*; and in Russia, those of Somorokof, are among the most conspicuous and esteemed. The character of the drama in America, towards the close of the eighteenth century, began to be more distinct and national than at any former period. Instead of waiting altogether for the productions of the English stage, and continuing to be its servile echo, the American stage has exhi-

ters are, in general, unnaturally drawn, but that such characters ought never to have been exhibited at all; not that their incidents are impossible or incredible, but that such incidents, whether in fiction or in real life, have always been powerful means of corrupting the principles and undermining the virtue of those by whom they were frequently contemplated.

* Baron Holberg was one of the most extraordinary characters of the age. He was born in Norway, towards the close of the seventeenth century; was the son of a private soldier, and learned to read without the help of a master. Being deprived of his father at nine years of age, he persisted in pursuing his studies, travelled from school to school, and begged his learning and his bread. Early in life he made the tour of Europe on foot, and came over to England, where he resided two years at the university of Oxford. Furnished with a large portion of the learning of Europe, he at length settled at Copenhagen, where his numerous writings gained him much public notice and liberal favours from the government. He composed eighteen comedies. Those in his own language are said to excel; and those which have been translated into French are represented as having great merit. He died about the year 1754.—Goldsmith's *Inquiry into the present State of Polite Learning.*

bited a considerable number of original pieces, and others adopted from the French and German. And though the former are not equal to the first class of British productions, and the moral tendency of some of the latter has been questioned; yet they form one step in that literary progress of the country, which is more particularly detailed in another place.

There are several characteristic features which belong to the dramatic compositions of the eighteenth century, in which they differ from those of any preceding age. It may be proper to take some notice of a few of these features before bringing this section to a close.

One circumstance in which modern dramas differ from those of former times is, that they are more *consistent and correct in the structure of their fable*. If they do not surpass or equal some preceding productions of this class in *genius*, they must be allowed to excel in *taste* and *regularity* of plan. Many of the noblest of the dramas which were given to the world before the eighteenth century, violated every principle of probability and nature. They departed from the most obvious unities of time, place, and action. They gave to one country the customs, laws, and general characters of another; and thus, amid splendid excellences, abounded with manifest absurdities; and while they gratified the taste, also put to a severe test the patience of the critic. With most of these faults, even the immortal Shakspeare is chargeable. The best dramatists of the eighteenth century may be said, in general, to adhere more closely to proba-

signalised themselves by discarding grossly sensual descriptions and indecent expressions from English Tragedy, were Mr. Rowe and Mr. Addison; and the like service was rendered to Comedy by sir Richard Steele, and some who immediately succeeded him.

But though the dramatic productions of the eighteenth century are in general more *decent*, and much less offensive in the exhibition of *coarse licentiousness*, many of them may be charged with a fault, which, though less obvious, is perhaps more mischievous in its tendency. This is, the artful interweaving of false principles in religion and morals with the whole structure of their fable and sentiments. Theatrical exhibitions, as well as Novels, have been employed to insinuate the poison of corrupt opinions, decorated and concealed, into unsuspecting minds. A splendid hero is made to inculcate and recommend the most hateful principles; and an ingeniously contrived series of incidents to prepossess the mind in favour of vice. This, considered as a system deliberately instituted for the purpose of operating on public opinion, it is believed is peculiar to the eighteenth century. Both Great Britain and France have given birth to a few dramatic productions formed on this plan; but they have still more abounded in Germany.

Another peculiarity of modern dramatic productions, especially of the *tragic* kind, is, that they abound more in *love* than the ancient models. In the ancient tragedies this subject was rarely mentioned or alluded to: still more seldom did any of them turn upon it. On the contrary,

love is the "main hinge of modern tragedy;" and where this is not the case, the introduction of the subject is considered as in some measure indispensable. This fact may be accounted for in several ways; but perhaps the most probable reasons to be assigned for it are the two following. The progress of civilisation, by increasing the importance of the female sex, has rendered every thing which concerns them, and particularly the passion of *love*, with its consequences, a more prominent object in society. The appearance of female performers on the stage, which is a modern improvement in the system of theatrical exhibition, probably also contributed to produce the same effect. But, whatever may have been the cause, the fact is undeniably true. The unseasonable introduction of love-scenes into the *Cato* of Addison is well known to diminish the consistency and dignity of that celebrated tragedy. The same may be said of many other popular pieces. Still it must be acknowledged that some modern dramas of great excellence and popularity have been formed without recurring to the aid of this powerful passion. Of this, Home's *Douglas* and Voltaire's *Merope* are illustrious examples. But such instances are certainly rare.

In recounting the remarkable poetical publications of the age, it would be improper to pass without notice two singular events, which have proved the sources of long-continued and violent controversies in the literary world, and concern-

ing which much diversity of opinion exists to the present day. The events alluded to are the publication of the poems of Chatterton, an extraordinary youth of Bristol; and the collection and exhibition, in a regular form, of the works of Ossian, by Mr. James Macpherson, a man who, by the connexion of his name with these poems alone, has attained high celebrity in the republic of letters.

In 1760 Mr. James Macpherson, of North Britain, surprised the world by the publication of "*Fragments of Ancient Poetry*, collected in the Highlands of Scotland, and translated from the Gaelic or Erse language." In 1762 he published "*Fingal, an Epic Poem*, in six books, together with several other Poems composed by Ossian, the Son of Fingal;" and again in 1763 he produced "*Temora, an ancient Epic Poem*, in eight books," with several additional poems. These were all ascribed to Ossian, an ancient Scottish bard*, and were declared by the publisher to have been collected, partly from old manuscripts, and partly from oral tradition.

Few of the literary controversies of the age excited more attention than that which immediately arose respecting the authenticity of these poems. By many learned men their antiquity was readily admitted; and their reception, particularly on the continent of Europe, was extremely favourable. There were not wanting enthusiastic admirers,

* This poet is said, by those who believe in the authenticity of the poems in question, to have flourished about the end of the second and the beginning of the third century.

who even placed Ossian on the same shelf with Homer and Virgil; who dwelt with rapturous praise on his stupendous merits; and made the most profuse acknowledgements to the man, who was supposed to have brought to light such precious remains of ancient genius *. On the contrary, many judges equally learned and acute have denied the authenticity of the poems ascribed to Ossian, and have insisted that they are forgeries by Mr. Macpherson himself †. Though this controversy is far from being terminated, yet the best supported and most probable opinion seems to be, that the poems in dispute are neither wholly the work of any ancient bard, nor entirely forged by Macpherson; but that the latter really made large collections of ancient Gaelic poetry, which he modified and connected in his own way, making additions with freedom where he thought proper, and forming an apparently regular work of fragments which were never before united ‡.

* Among the distinguished characters who have contended for the authenticity of Ossian's poems may be mentioned Dr. Blair, lord Kames, Dr. Henry, Mr. Whitaker, and on the continent of Europe a large number.

† Dr. Johnson not only utterly denied the authenticity of these poems, but also maintained that they had no merit. His opinion on the former point may, with some qualification, be admitted; but on the character of the work, it is difficult to suppose that so acute and profound a critic could deliver such an unfavourable judgement, without improper bias. Though the poetry of Ossian has been extravagantly estimated, it is surely worthy of much praise.

‡ On the one hand, it is by no means credible that a man of Macpherson's mediocrity of talents could be himself the *author* of the poems which bear the name of Ossian; nor can it be supposed that any one, however great his powers, could *completely*

But whatever may be the origin of the poems which have passed under the name of Ossian, they doubtless possess merit of a wonderful kind. Amidst the obscurity which remarkably pervades them, and the frequent, and even disgusting, recurrence of the same images, such as the extended heath by the seashore; the mountain covered with mist; the torrent rushing through a solitary valley; the scattered oaks; the tombs of the warriors overgrown with moss; and the melancholy notes resounding from the hall of shells; still these celebrated productions abound with rich beauties; with energy of style, force of description, pathos, tenderness, and in some instances with sublimity of the highest order.

In 1777 were published "Poems supposed to have been written at Bristol, by Thomas Rowley, and others, in the fifteenth Century." These poems were first brought to light by Thomas Chatterton, a youth of humble origin, and small advantages of education *, who professed to be

forge compositions bearing so many marks of antiquity, both in the style, the sentiments, and the historical facts. On the other hand, it is no less difficult to believe that *manuscript* copies of these poems, in the form in which we now see them, should have existed from very remote antiquity.

* Thomas Chatterton was born in the city of Bristol, November 20th, 1752. His father was the master of a free school in that city, and was too poor to give his son any of the advantages of a liberal education. His acquirements, therefore, were chiefly made up of such an acquaintance with English literature as a mind of wonderful force, ardour, and ambition might be expected to gain under the constant pressure of poverty and other difficulties, and in the short space of less than eighteen years. He began to write poetry about the *eleventh* year of his age; and was but a

only the transcriber, and declared that they were written by Rowley, a clergyman of Bristol, more than three centuries before their discovery by him. They consist chiefly of dramatic, lyric, and pastoral pieces, and are pronounced by some persons of distinction in the literary world to be the real works of Rowley, to whom they were attributed; while a greater number of equal discernment and acquaintance with the subject have decided that they are forgeries, and that Chatterton himself was the author *. After much learned, ingenious,

little more than *sixteen* when he produced the celebrated poems ascribed to Rowley. These he constantly affirmed he had copied from manuscripts found in an old church in his native city; but he never could be persuaded to produce any of the originals, except a few fragments, which he asserted were among the number, the largest of which was not more than eight inches long, and four or five wide. Though the more general and probable opinion at present is, that this remarkable youth was the real author of the poems which have passed under Rowley's name; yet some other works, certainly known to have been produced by him, place him high in the ranks of genius. Some of his *elegies* and *satires*, in particular, unquestionably display great talents. He died miserably in London, August 25, 1770. His death is ascribed to poison, which he had swallowed in a fit of criminal impatience and overwhelming despair, with the design to terminate his sufferings. He is said to have imbibed (in the two or three last years of his life) principles of the most licentious kind, and to have been very immoral in his practice. His mind was aspiring and ambitious to a degree almost boundless; and not meeting with that success or those rewards of his talents which he had fondly hoped, he took refuge in a voluntary death, and left a monument of unfortunate degraded genius, of which a parallel will scarcely be again contemplated.

* Among those who have contended that these poems were written by Rowley, Dr. Milles, dean of Exeter, and Mr. Bryant, are the most conspicuous. The principal writers who have con-

and interesting discussion, the latter opinion seems to be considered as, on the whole, the better supported, and more probable.

The poems in dispute possess a very extraordinary character. The subjects are generally well chosen and interesting; the plot, fable, and machinery, show the author to have had a vigorous and active imagination; the delineation of character, and the luxuriancy of description with which they abound, evince a happy union of taste and genius; and, different from all the poetical productions which were written at the time when these are asserted to have been composed, they are in general remarkable for harmony and elegance of versification *. Indeed, good judges have pronounced, that some passages are inferior in none of the essentials of poetry to the most finished works of modern times.

If the poems in question be attributed to Rowley, then we are presented with the singular spectacle of one of the first English poets, both in time and merit, sleeping in obscurity for more than three hundred years, and being at last robbed of his just reputation by the most wonderful literary delusion that ever possessed mankind. If, on the other hand, it be concluded that Chatterton was

tended that Chatterton is the real author, are Walpole, Tyrwhitt, Gray, Warton, Mason, Croft, and Malone.

* This harmony and elegance of versification appear under all the disadvantages of the antiquated diction adopted by the author. If Chatterton was the author of the poems, it was necessary to his purpose to employ this diction; and he is supposed to have become familiar with the language of the fifteenth century by perusing the works of Chaucer.

the real author of the poems ascribed to Rowley, then the eighteenth century gave birth to the most astonishing genius that ever existed; a genius sublime and universal; and which, considering that all his efforts were made before he reached his eighteenth year, may probably be pronounced with safety to have been an *unique* in the history of man *.

No poet of reputation had appeared in *America* prior to the eighteenth century. But since the commencement of this period, the western hemisphere, and especially that part of the continent denominated the *United States*, has given birth to several poets of respectable character. Among these the rev. Dr. Dwight, before mentioned, holds a distinguished place. His *Conquest of Canaan*, though a juvenile performance, and labouring under several disadvantages, contains much excellent versification †, and, in general correctness, has not been often exceeded. *Greenfield Hill*, a moral, didactic, and descriptive poem, by the same author, is also entitled to considerable praise, for exhibiting pure and elevated sentiment, just principles, and beautiful descriptions, in har-

* Mr. Wharton speaks of Chatterton as "a prodigy of genius." Mr. Malone believes him to have been "the greatest genius that England has produced since the days of Shakspeare." Mr. Croft says, "no such human being, at any period of life, has ever been known, or possibly can be known."

† This is the opinion of Dr. Darwin, expressed in a note to his celebrated poem, *The Botanic Garden*.

monious and excellent verse. The *M'Fingal* of Mr. Trumbull was mentioned in a former page, as doing high honour to the talents of its author. *The Vision of Columbus*, and other poems, by Mr. Barlow, are possessed of much poetic merit. To these may be added the various productions of Mr. Humphreys, Mrs. Morton, Dr. Ladd, Mr. Freneau, and several others, who, though far from being worthy of a place among the first class of poets, have yet manifested talents honourable to themselves and their country, and have been noticed with respect by foreign as well as domestic critics.

From the statement contained in the last paragraph, it appears that *New England*, and particularly the state of *Connecticut*, has been more distinguished by the production of poetical genius, than any other part of our country. Of the few poets to which North America has given birth, several of the most eminent are natives of that State.

But though the conspicuous poets of America are not numerous, we are by no means to ascribe this circumstance either to the paucity or the barrenness of American genius. Great poetical merit has been rare in all ages, and in all countries; and that it should be peculiarly rare in a country where literature has comparatively few votaries, and where those who have any taste for letters have little respite from the toils of professional and active life, is so far from being unaccountable, that the contrary would be wonderful.

After the foregoing details, it may not be improper, before closing this chapter, to offer some general reflexions on the peculiar poetic character of the eighteenth century. Having already employed so many pages on this subject, the most brief and general views only will be attempted.

The last age exceeds all preceding periods with respect to the *quantity* of its poetry. It is perhaps not going beyond the truth to say, that a greater amount of poetic composition was published in the course of the eighteenth century, than all former ages together could furnish.

It may also be stated as a general truth, that the poetry of the last age is more distinguished for *taste* than *genius*; more remarkable for polish, smoothness, and harmony, than for invention, strength, and boldness of thought and imagery; and abounds more in those qualities which soothe, amuse, and please, than in those which elevate, astonish, and transport the mind. To some of the names mentioned in the foregoing pages, it is readily acknowledged that exalted genius belonged; but, without staying to perform the task, equally invidious and difficult, of adjusting the different claims of authors on this head, it may certainly be hazarded, as a general remark, that the prevailing character of modern poetry is that of *correctness* and *taste*. While those who were most distinguished in preceding times, for originality and sublimity, were often guilty of the grossest violations of taste; while, in many of their writings, blunders and absurdities were frequently found mixed up, in nearly equal proportions, with

beauties and graces, it may be said, to the honour of the first class of poets of the eighteenth century, that if they fall below some of their predecessors in the bold, the original, and the sublime, they as much exceed them in taste, refinement, uniform proprietry, and general elegance of versification.

It may further be asserted, that a greater portion of the poetry of the last age is *purely moral*, than was ever before offered to mankind. Most of the distinguished poets of former times were faulty in this respect, and some of them grossly so. When we look particularly into the English poets who lived prior to the eighteenth century, we find them all, if we except Spencer, Shakspeare, and Milton, representing *love* rather as an *appetite* than a chaste and dignified *passion*. Accordingly they were accustomed to put language into the mouths of the most virtuous and delicate females, utterly inconsistent with our ideas of decorum. It has been said that Prior's *Henry and Emma* is the first poem in the English language, keeping in view the exception before stated, in which love is treated with the decency and delicacy to which it is entitled.

Among many of the latter poets we find a chasteness in the exhibition of characters and manners, a purity of morals, and a delicacy of sentiment, which transcend all former example. The greater part of the moral pieces of Pope may be safely applauded in this view, as more worthy of imitation than those of most of his predecessors. Young has enlisted the sublimity of imagination, and the music of numbers, on the side of virtue and piety, with the most happy success. The

muse of Thomson, while pouring forth the most splendid beauties, dictated

" Nothing which, dying, he could wish to blot."

For the same kind of excellence Goldsmith and Johnson deserve the highest praise. In this respect, also, Cowper is inferior to none. His various performances display beauty of description and vigour of language, blended with dignity of virtue and piety, to a degree which places his character, both as a man and a Christian, in the most honourable point of view. In short, to discard coarse indelicacy from the pictures of poetry; to recal Genius from the paths of Vice and Folly, and enlist her in the service of chaste Enthusiasm and divine Morality; are among the shining honours of the last age. And perhaps on no ground does its poetic character deserve higher eulogium than for the production and the general popularity of such writers as Pope, Young, Klopstock, Gesner, Thomson, and Cowper.

Again; the *discoveries in science* which distinguish the eighteenth century have also conferred some peculiarity on the poetic character of the age, by furnishing the poet with new images, and more just and comprehensive views of nature. It would not be difficult to show that the improvements in every branch of the physical sciences, and particularly in *Natural Philosophy, Chemistry,* and *Natural History,* have all produced new materials for the labours of poetic genius, enriched the stores both of imagery and diction, and thus

contributed to render this kind of composition at once more instructive and more pleasing.

Finally, in enumerating the peculiar advantages under which poetic compositions were presented during the last age, it would be improper to omit taking notice of the illustration of poetic pictures by *elegant engravings*, and other appropriate ornaments. The *Shakspeare Gallery*, the plates for illustrating *Milton*, *Thomson*, and many other distinguished poets, had certainly no equals in any preceding age.

CHAPTER XXI.

LITERARY JOURNALS.

IN the former part of the seventeenth century, "it was a consolation, at least for the unsuccessful writer, that he fell insensibly into oblivion. If he committed the *private* folly of printing what no one would purchase, he had only to settle the matter with his publisher: he was not arraigned at the *public* tribunal, as if he had committed a crime of magnitude *." But in the latter part of that century, Periodical Criticism began to brandish its formidable weapon, and those who undertook to write for the public were placed in a new situation. Publications made at stated intervals, giving accounts and abstracts of new books, and announcing new discoveries and improvements in science, then took their rise, and have been ever since continued. The eighteenth century is chiefly remarkable for an increase of their number, for various changes in their form and character, for their more general circulation, and for a corresponding extension of their influence on the taste and opinions of the public.

The first work of this kind ever undertaken was the *Journal des Scavans*, published at Paris,

* *Curiosities of Literature*, vol. i, p. i.

by M. Sallo *, in 1665. The original plan of this work comprehended a vast variety of subjects. "It gave an account of all books which appeared in Europe; contained eulogies on deceased celebrated men; and announced whatever had been invented that was useful in art, or curious in science. Experiments in physic and chemistry, celestial and meteorological observations, discoveries in anatomy, the decisions of ecclesiastical and secular tribunals, and the censures of the Sorbonne, were all proposed to be noticed." This attempt of Sallo was so well received, that, in the course of a few years, it was imitated in almost all the literary countries of Europe, and his work was translated into various languages.

In 1671 appeared the *Acta Medica Hafniensia*, published by M. Bartholin. To this work succeeded *Mémoires des Arts et des Sciences*, established in France, by M. Dennis, in 1672; the *Acta Eruditorum* of Leipsic, by Merkenius, in 1682; the *Nouvelles de la République des Lettres*, by M. Bayle, in 1684; the *Bibliothéque Universelle Choisie, Ancienne et Moderne*, by le Clerc, about the same time; the *Histoire des Ouvrages des Scavans*, by M. Basnage, in 1686; the *Monathlichen Unterredungen*, of Germany, in 1689; the *Boockzal van Europe*, by Peter Rabbus, in Holland, in 1692; an *Historical Treatise of the Journals of the Learned*, in Latin, by Juncker, the

* Dennis de Sallo was an ecclesiastical counsellor in the parliament of Paris. He published his *Journal* in the name of the sieur de Hedouville, his footman; perhaps because he entertained but a faint hope of success, or because he thought the scurrility of criticism might be permitted on account of its supposed author.

same year; the *Nova Literaria Maris Balthici*, in 1698; together with several others in Germany, France, and Italy. The first work of the kind established in Great Britain was the *History of the Works of the Learned*, begun in London, in 1699. Such was the state of Europe, with respect to literary journals, at the close of the seventeenth century. It will be observed, that, as they began in France, so they were most numerous and most encouraged in that country for a long time afterwards.

Soon after the commencement of the eighteenth century these publications greatly increased both in number and in the extent of their circulation. But this increase, for the first forty years of the period we are considering, was chiefly confined to the continent of Europe. The attempts in Great Britain were few and short-lived. About the beginning of the century M. de la Roche formed an English Journal, entitled *Memoirs of Literature*. To this succeeded the *Present State of the Republic of Letters*, by Reid; the *Censura Temporum*, established in 1708; and the *Bibliotheca Curiosa*, about the same time. These, however, were by no means so instructive and interesting as modern *Reviews*. They only gave notices of a few principal publications, and retailed selections from foreign journals; and, together with several others too unimportant to be named, were soon discontinued.

No establishment of this nature, either permanent or in any high degree respectable, was made in Great Britain until 1749, when the *Monthly Review* was commenced; which has been ably

supported until the present time. The *Critical Review* was established in 1756, nearly on the same plan. These were the only regular works of the kind in England until 1775, when another was begun, under the title of the *London Review*, by Dr. Kenrick, which however lasted but a little while. From that period to the end of the century they increased rapidly in number. They became gradually improved in their form, and were made to present a greater amount of information respecting the several works which they reviewed. Few magazines or periodical publications of any kind have been undertaken, within a few years past, which did not include some kind of Review; insomuch that the literary journals in Britain at present are extremely numerous.

The attempts to establish regular Reviews of new books, and of the progress of letters and science, in the United States, have been few, and generally unsuccessful. The small progress of a literary taste among the mass of their citizens; the scattered state of their population; the rarity of leisure with those who are best entitled to the character of scholars; together with the want of talents, enterprise, and capital, in the greater number of those who have hitherto undertaken to conduct such works, may be considered as the principal causes of their failure *.

*. As early as 1741 a kind of Review was attempted by Dr. Franklin, who, in a Magazine which was continued only for a few months, gave notices of new American books, and presented liberal extracts from them. Attempts of a similar kind were made in several successive works a few years afterwards, but with as little encouragement and success. Exertions were made to

The Reviews of the eighteenth century are publications of a very different character from the Literary Journals of the seventeenth. A great portion of the latter were in the Latin language; and almost all of such a nature as to be intelligible only to the learned. Of course they were seen and perused by few persons, and their influence on public taste and opinion was comparatively small. But the Reviews of the last age, beside being multiplied to an unexampled extent, have received a popular cast, which has enabled them to descend from the closets of philosophers, and from the shelves of polite scholars, to the counting house of the merchant, to the shop of the artisan, to the bower of the husbandman, and indeed to every class of the community, excepting the most indigent and laborious. In fact, they have contributed to give a new aspect to the republic of letters, and may be considered as among the most important literary engines that distinguished the period under consideration.

These publications have produced many advantages. They have excited a more general at-

establish a more regular Review of American publications, about the year 1790, in two periodical works nearly at the same time, the one in *Philadelphia*, and the other in *Boston*. They were conducted, however, on a very small scale, with little of the boldness and impartiality of true criticism, and commanded little attention from the public. They were, consequently, soon laid aside; as were several other undertakings of a similar kind, for like reasons. In 1799 a more full and formal *Review* was begun in New York, which has continued to the present time, and which, from the share of public patronage and attention bestowed upon it, bids fair to be longer lived than any of its predecessors.

tention to the progress of literature than any former period could boast. They have diffused a knowledge of books, a taste for reading, and a spirit of curiosity and criticism, more widely than was ever before known, and among a portion of mankind which had never before been reached by such a taste. When well conducted, they have served to correct public opinion; to lay a salutary restraint on adventurers in literature; to present a powerful and useful check to the licentiousness of the press; and to furnish rich materials for the history of human knowledge. It is true, these publications, which should be guides of popular opinion, are often partial, and sometimes grossly erroneous. Written by a number of different persons, and of course with different abilities, opinions, passions, and prejudices, the judgements they express can seldom be admitted without cautious inquiry and modification. Still, however, though the learned must ultimately judge for themselves, yet even *they* derive benefit from literary journals tolerably conducted; and their influence upon the great mass of those who occasionally read is extensive and important. If it be objected that the knowledge they diffuse is superficial, it is what multitudes would never attain if this means of bringing it within their reach were wanting; and that it is no better than total ignorance, none will presume to contend.

There is another class of publications nearly allied to literary journals, and by the multiplication of which the eighteenth century is much distinguished, the *Transactions* of *Academies* and *Philosophical Societies.* Publications of this kind

appear to have taken their rise near the middle of the seventeenth century; but, for a considerable time afterwards, they were few in number, and were presented to the public at distant and irregular intervals. Since the commencement of the period under consideration, they have greatly increased in number, in the extent of their circulation, and in the practical and useful nature of their contents. Associations for literary and scientific purposes, of various kinds, and under different names, have multiplied in every part of the learned world, and have laid before the public, at stated times, the result of their experiments and inquiries; insomuch that from the aggregate of their *Transactions* a catalogue might be formed of several thousand volumes, most of which include much matter highly interesting to the philosopher, the artist, and the man of taste, and may be considered as presenting a tolerable history of human knowledge during the period which they embrace.

This mode of recording and announcing the discoveries and labours of science, though productive of much good, is yet not without its disadvantages. To understand the *memoirs* and *acts* which these ponderous volumes contain, usually requires a profound knowledge of the subject. They are addressed by philosophers to philosophers. Hence, though their circulation is more extensive in modern times than formerly, they are, of necessity, even yet read by a chosen few. On this account it is, that while the archives of societies are filled with interesting and instructive memoirs, these labours of the learned are seldom

brought forth from their obscure retreat, reduced to systematic arrangement, and exhibited in a popular manner. And for the same obvious reason it happens that the *Transactions* of literary societies display a repetition of the same hints, experiments and discoveries, which, for want of being more generally known, are often supposed, at each successive exhibition, to be original. This latter evil, however, begins to be in some measure remedied, by adopting a more popular form for these publications, and also by communicating from time to time to the public the most important portions of their contents, in vehicles of more extensive circulation.

Next to regular *Reviews*, and the formal *Memoirs* and *Transactions* of literary and scientific societies, it is proper to take notice of the numerous periodical works, under the name of *Magazines*, &c., with which the republic of letters has abounded in modern times. The astonishing number and the extensive circulation of these works, are certainly among the peculiar characteristics of the age, and mark an important era in the history of learning.

The first publication ever made under the title of a *Magazine* was in the year 1731, by Edward Cave, of London, who then commenced the *Gentleman's Magazine*, which has been continued to the present time. Several periodical works had before appeared under different names; but they were chiefly confined to political transactions, and to foreign and domestic occurrences of various kinds, without paying much attention to literary objects. Indeed, this was the case with Mr.

Cave's Magazine for several years after its commencement. The way, however, was gradually opened for the introduction of literary, moral, and philosophical discussions, and the work proved to be one of the most popular and productive periodical pamphlets ever published.

In the latter half of the eighteenth century, and especially in the last twelve or fifteen years of this period, these monthly miscellanies multiplied to a prodigious amount, and gained a circulation beyond all former example. The taste for works of a similar kind spread rapidly over the continent of Europe; insomuch that their number at the present time is almost too great to be accurately estimated.

In America the attempts to establish Magazines of different kinds have been very numerous; but, for the want of due encouragement, they have generally failed in a short time. It is believed that the first attempt to publish a work of this nature in North America was about the year 1741, by Dr. Benjamin Franklin, then a printer, in Philadelphia. His publication, however, under the title of the *General Magazine and Historical Chronicle*, after a few months, was discontinued. Since that time many similar undertakings have solicited the public patronage, and have gained attention and currency for a time, but have seldom protracted their existence beyond four, six, or at most eight, years.

The influence of these miscellaneous publications has been as remarkable and extensive as their number, and in many respects of considerable advantage. They have excited a taste for reading in many who would never have en-

dured it under any other form than that of amusement. They have inspired many youthful minds with a spirit of literary ambition and enterprise, which has been productive of the most brilliant and successful exertions. They have recorded a number of facts, hints, observations, and discussions, instructive at the time they were made, and invaluable to posterity, but which would inevitably have been lost had they been presented to the public in a more evanescent form. And, finally, they have shed, in a gradual and almost insensible manner, numberless rays of knowledge among all descriptions of persons in the community, even indirectly among millions who never enjoyed the perusal of them; and have thus greatly enlarged the public understanding, and astonishingly increased the sum of popular information.

But the great popularity and the unexampled circulation of these periodical works have also been attended with some disadvantages. They have made thousands of light, ostentatious, and superficial scholars, and have evidently operated unfavourably to sound and deep erudition. They have led many a self-sufficient pedant to content himself with shining in borrowed plumes, and to indulge in the deceitful expectation of finding short and easy paths to real scholarship. They have discouraged those habits of *connected* reading, and of patient *systematic* thinking, which were the glory of the learned in former ages, and enabled them to accomplish those mighty labours which fix their posterity in astonishment. Accordingly, it would perhaps be no difficult task to show that the general literary features of the

period before us remarkably correspond with this unfavourable picture, and that the general diffusion of superficial reading and scraps of knowledge may be said preeminently to characterise the last age.

But this is not the whole of the evil. Such are the effects which must result from the general circulation of works of this nature, supposing them to be, on the whole, well conducted. Many of them, however, are by no means entitled to this character. They have often given prompt and willing currency to erroneous opinions in morals and religion. They are too frequently found receptacles of such filth, obscenity, and impiety, as are fit for the perusal of none but the prostitute, the thief, and the murderer. It is scarcely necessary to add, that the effect of such publications on the manners, principles, and happiness of society, must be in a high degree pestiferous; and that this is one among the numerous instances in modern times, in which literature, perverted and abused under plausible forms, has been found insidiously to undermine the morals and welfare of man.

Another item in the literary history of the age falls perhaps more properly within the design of this chapter than of any other part of the present sketch. The mode of addressing the public by short periodical *Essays*, though not wholly peculiar to the eighteenth century, was yet so much extended, and had such a powerful influence in this period, as to entitle it to be ranked among the remarkable circumstances of the age. "To teach the minuter decencies and inferior duties; to regulate the practice of daily conversation; to cor-

rect those depravities which are rather ridiculous than criminal, and remove those grievances which, if they produce no lasting calamities, impress hourly vexation, was first attempted by Casa, in his book of *Manners*, and by Castiglione, in his *Courtier* *; two books yet celebrated in Italy for purity and elegance, and which, if they be now less read, are neglected only because they have effected that reformation which their authors intended, and their precepts are no longer wanted. Their usefulness to the age in which they were written is sufficiently attested by the translations which almost all the nations of Europe were in haste to obtain. This species of instruction was continued, and perhaps advanced, by the French; among whom la Bruyere's *Manners of the Age* †, though, as Boileau remarked, it is written without connexion, certainly deserves great praise for liveliness of description and justness of observation ‡."

The first series of essays devoted to common life in Great Britain was the *Tatler;* the publication of which began in 1709, by sir Richard Steele, assisted by Addison, Tickel, and others. It appeared three times a week. To the *Tatler*, in about three months succeeded the *Spectator;* a series of essays of the same kind, but written with less levity, upon a more regular plan, and published daily. "The *Tatler* and *Spectator*," says

* Casa and Castiglione were Italian writers, who flourished in the sixteenth century.

† La Bruyere wrote towards the close of the seventeenth century.

‡ Johnson's *Life of* Addison.

Dr. Johnson, "adjusted, like Casa, the unsettled practice of daily intercourse by propriety and politeness; and, like la Bruyere, exhibited the characters and manners of the age. But to say that they united the plans of two or three eminent writers, is to give them but a small part of their due praise. They superadded literature and criticism, and sometimes towered far above their predecessors, and taught, with great justness of argument, and dignity of language, the most important duties and sublime truths. All these topics were happily varied with elegant fictions and refined allegories, and illuminated with different changes of style and felicities of invention. It is said by Addison, in a subsequent work, that they had a perceptible influence upon the conversation of that time, and taught the frolic and the gay to unite merriment with decency; an effect which they can never wholly lose while they continue to be among the first books by which both sexes are initiated in the elegances of knowledge *."

The Spectator had not been supported more than eighteen months when it was discontinued. The year after, viz. in 1713, the *Guardian* was undertaken by the same editor, assisted by the gentlemen before mentioned, as well as by Mr. Pope, Dr. Berkley, and others, and continued a little more than six months, with nearly the same respectability and success which had attended its predecessor. It was natural for the excellence and the reputation of these papers to produce many imitations. Accordingly, for a number of

* Life of Addison.

years afterwards, periodical papers were continually announced, and pursued for a little while, under different names, and upon various plans; but they were generally feeble when compared with the noble models which had gone before them, and seldom commanded the public attention for any length of time. Among these might be enumerated the *Humourist*, the *Observer*, and a vast multitude of others that rose into view, lived their day, and sank into forgetfulness. The *Free-Thinker*, *Cato's Letters*, and the *Craftsman*, were executed with greater ability, and were also better received, being more devoted to political discussion, than the papers which had gone before them. In 1750 the *Rambler* appeared, and for the first time presented a rival to the enchanting productions of Addison and his contemporaries. In this work Dr. Johnson, the principal writer, carried the composition of moral essays and instructive narrations, with respect to purity and dignity of sentiment, acuteness of observation, and vigour of style, to a higher degree of perfection than they had ever before reached. Next followed the *Idler*, also by Dr. Johnson, but less laboured, and more light and superficial in its character, than the *Rambler*. These were succeeded by the *Adventurer*, the *World*, the *Connoisseur*, the *Mirror*, the *Looker On*, the *Lounger*, and the *Observer*, which generally consist of papers of great merit, and will long be read with pleasure. The numerous unsuccessful attempts which have been made, within a few years past, to revive this mode of writing, seem to indicate that it is nearly exhausted; and that to renew and carry it on re-

quires more diligence, ability, and leisure, than commonly fall to the lot of those who adventure in such a field.

From the foregoing details it appears that the eighteenth century may be emphatically called *the age of periodical publications.* In the number of these it so far transcends all preceding times, as to forbid comparison; and their amusing popular form constitutes a peculiarity in the literary history of the period under consideration equally signal. They form the principal means of diffusing knowledge through every part of the civilised world; they convey, in an abridged and agreeable manner, the contents of many ponderous volumes, and frequently supersede the appearance of such volumes; and they record every species of information, from the most sublime investigations of science to the most trifling concerns of amusement. When the future historian shall desire to obtain a correct view of the state of literature and of manners, during this period, he will probably resort to the periodical publications of the day, as presenting the richest sources of information, and forming the most enlightened and infallible guides in his course.

CHAPTER XXII.

POLITICAL JOURNALS.

THE method of announcing political events, and the various articles of foreign and domestic intelligence which usually engage the attention of the public, by means of *Gazettes* or *Newspapers*, seems to have been first employed in Italy, as early as the year 1536 *. It was in that country that these vehicles of information received the name *Gazetta* †, which they have ever since retained ‡.

The earliest newspaper printed in Great Britain was " *The English Mercurie*, by Christopher Bar-

* The first Gazette is said to have been printed at Venice, and to have been published monthly. It was under the direction of the government.

† The word *Gazetta* is said, by some, to be derived from *Gazerra*, a *Magpie* or *Chatterer*; by others, from the name of a little *coin* called *Gazetta*, peculiar to the city of Venice, where newspapers were first printed, and which was the common price of these periodical publications; while a third class of critics suppose it to be derived from the Latin word *Gaza*, colloquially lengthened into the diminutive *Gazetta*, and, as applied to a newspaper, signifying *a little treasury of news.—Curiosities of Literature*, vol. i, p. 271.

‡ Those who first wrote newspapers were called by the Italians *Menanti*; because, says Vossius, they intended commonly by these loose papers to spread about defamatory reflexions, and were therefore prohibited by Gregory XIII, by a particular bull, under the name of *Menantes*, from the Latin *minantes.—Curiosities of Literature*, vol. i, p. 273.

ker," her highness's printer, in 1588. But public prints of this kind, after the dispersion of the Spanish armada, seldom appeared. The first regular weekly newspaper published in this country was by Nathaniel Butter, in August 1622, entitled "*The certaine Newes of this present Weeke.*" Three years afterward another of a similar kind was established. But during the civil wars, which took place under the protectorate of Cromwell, these channels of public intelligence became more numerous than ever, and were diligently employed by both parties to disseminate their opinions among the people. About that time appeared the *Mercurius Aulicus*, the *Mercurius Rusticus*, the *Mercurius Civicus*, &c. And it is said, that "when any title grew popular, it was frequently stolen by some antagonist, who, by this stratagem, obtained access to those who would not have received him, had he not worn the appearance of a friend. These papers soon became a public nuisance. Serving as receptacles of party malice, they set the minds of men more at variance, inflamed their resentments into greater fierceness, and gave a keener and more destructive edge to civil discord. But the convulsions of those unhappy days left few either the leisure, the tranquillity, or the inclination, to treasure up occasional or curious compositions; and so much were they neglected that a complete collection is now no where to be found, and little is known respecting them *."

* Johnson's *Life of* Addison.

The earliest British Gazette of which any distinct record remains was that published in 1663 by sir Roger L'Estrange, under the title of the *Public Intelligencer*. This he continued until the year 1665, when a kind of court newspaper was established at Oxford, then the seat of government, and issued every Tuesday. The first number was printed in the month of November of that year, and appears to have superseded sir Roger's. Soon after this the court was removed to London, on which the title of the paper was changed to the *London Gazette*, the name which it still bears.

From the middle of the seventeenth century the employment of newspapers as channels of intelligence became more frequent and popular, not only in Great Britain, but also in several other countries of Europe. Newspapers and pamphlets were prohibited in England by royal proclamation in 1680. At the Revolution, in 1688, this prohibition was taken off; but in a few years afterward newspapers were made the objects of taxation, and were first stamped for this purpose in 1713. Their number, however, has been constantly increasing from that period till the present time: but since the beginning of the eighteenth century, this increase, particularly in Great Britain *, France, Germany, and America, has been almost incredibly great.

* There was no newspaper in Scotland till after the accession of king William and queen Mary. At the Union there were *three* established in that part of the united kingdom. In the kingdom of Great Britain the whole number of newspapers print-

Perhaps in no respect, and certainly in no other enterprise of a literary kind, have the United States made such rapid progress as in the establishment of political journals. At the beginning of the eighteenth century there was no publication of this kind in the American Colonies. The first newspaper printed in America was the *Boston News-Letter*, begun April 24th, 1704, in the town of which it bears the name, by B. Green. The second was the *Boston Gazette*, which commenced toward the latter end of the year 1720, by Samuel Kneeland. The next year a third was published, under the title of the *New-England Courant*, by James Franklin *. Between the last mentioned year and 1730, three other newspapers were published in Boston, though some of them appear to have been soon laid aside. As the first printing work done in North America was executed in Massachusetts, so in that colony the earliest, and for a number of years the most vigorous and successful exertions were made for the establishment and circulation of political journals.

The first newspaper printed in *Pennsylvania* was *The American Weekly Mercury*, by Andrew Bradford, the publication of which commenced December 22, 1719. The first printed in New

ed in the year 1775, was 12680000. In 1782 the number had increased to 15272519. At the close of the century they were still more numerous.

* James Franklin was a brother of Benjamin Franklin, who afterward became so conspicuous as a man of science and a politician. Benjamin was at that time employed as an apprentice in his brother's office, and contributed much to render the *Courant* popular.

York, it is believed, was by William Bradford *, October 16th, 1725, under the title of *The New-York Gazette.* The first paper published in *Rhode Island* was the *Rhode-Island Gazette,* by James Franklin, before mentioned, who began the publication in October 1732. The first in *Connecticut* was by James Parker, in 1755; and the first in *New Hampshire,* by Daniel Fowle, in 1756. The periods at which *Gazettes* were first introduced into the other states are not certainly known. In 1771 they had increased to the number of *twenty-five;* and in 1801 more than *one hundred and eighty* different newspapers were printed in different parts of the United States †.

* The family of the Bradfords deserves to be mentioned in honourable connexion with that of the Greens, in the annals of American printing. The press of Samuel Green was the first introduced into New England; and the presses of Andrew and William Bradford were, it is believed, the first established in Pennsylvania and New York. It is remarkable that there has been, for more than a century past, in both these families, a constant and respectable succession of printers.

† Of these about *fifteen* are *daily* papers; and supposing 1000 copies of each to be printed, the whole number of copies annually distributed, making due allowance for Sundays, *&c.*, will be about 4590000. The number printed *three* times a week is about *nine.* Of these, supposing 800 copies to be on an average stricken off, the amount annually distributed will be 1080000. About *twenty-five* are printed *twice* a week. Of these, allowing 800 copies each to be the common number sent abroad, the number annually circulated will be 2000000. Finally, about *one hundred and thirty* newspapers are printed *weekly;* and, allowing the number of each published to be 800, the amount of this class annually edited will be 5408000. So that the whole number of newspapers annually circulated in the United States may be estimated at *thirteen millions and seventy-eight thousand.* For the sake of being rather below than above the mark, say *twelve mil-*

It is worthy of remark, that newspapers have almost entirely changed their form and character within the period under review. For a long time after they were first adopted as a medium of communication to the public, they were confined in general to the mere statement of *facts*. But they have gradually assumed an office more extensive, and risen to a more important station in society. They have become the vehicles of discussion, in which the principles of government, the interests of nations, the spirit and tendency of public measures, and the public and private characters of individuals, are all arraigned, tried, and decided upon. Instead therefore of being considered now, as they once were, of small moment in society, they have become immense moral and political engines, closely connected with the welfare of the state, and deeply involving both its peace and prosperity.

Newspapers have also become important in a literary view. There are few of them, within the last twenty years, which have not added to their political details some curious and useful information on the various subjects of literature, science, and art. They have thus become the means of conveying to every class in society innumerable scraps of knowledge, which have at once increased the public intelligence, and extended the taste for perusing periodical publications. The *advertise-*

lions. It will be seen, by comparing this with a preceding note, that, while the population of the United States is not more than *one half* of that of Great Britain, the number of newspapers circulated in the former country may be estimated at more than *two thirds* of the number published in the latter.—See *Additional Notes, (H)*.

ments, moreover, which they daily contain, respecting new books, projects, inventions, discoveries, and improvements, are well calculated to enlarge and enlighten the public mind, and are worthy of being enumerated among the many methods of awakening and maintaining the popular attention with which more modern times, beyond all preceding example, abound.

In ancient times, to sow the seeds of civil discord, or to produce a spirit of union and cooperation through an extensive community, required time, patience, and a constant series of exertions. The art of printing being unknown, and many of the modern methods of communicating intelligence to distant places not having come into use, the difficulty of conducting public affairs must have been frequently great and embarrassing. The general circulation of *Gazettes* forms an important era, not only in the moral and literary, but also in the political world. By means of this powerful instrument impressions on the public mind may be made with a celerity and to an extent of which our remote ancestors had no conception, and which cannot but give rise to the most important consequences in society. Never was there given to man a political engine of greater power; and never, assuredly, did this engine before operate upon so large a scale as in the eighteenth century.

America in particular, and especially for the last twelve or fifteen years, has exhibited a spectacle never before displayed among men, and even yet without a parallel on earth: it is the spectacle, not of the learned and the wealthy only, but of

the great body of the people, even a large portion of that class of the community which is destined to daily labour having free and constant access to public prints, receiving regular information of every occurrence, attending to the course of political affairs, discussing public measures, and having thus presented to them constant excitements to the acquisition of knowledge, and continual means of obtaining it. Never, it may be safely asserted, was the number of political journals so great, in proportion to the population of a country, as at present in America: never were they, all things considered, so cheap, so universally diffused, and so easy of access*: and never were they actually perused by so large a majority of all classes, since the art of printing was discovered.

The general effects of this unprecedented multiplication and diffusion of public prints form a subject of the most interesting and complex calculation. On the one hand, when well conducted, they have a tendency to disseminate useful information; to keep the public mind awake and active; to confirm and extend the love of freedom; to correct the mistakes of the ignorant, and the impositions of the crafty; to tear off the mask from corrupt and designing politicians; and finally to promote union of spirit and of action among the most distant members of an extended community.

* The extreme cheapness with which newspapers are conveyed by the mail, in the United States, added to the circumstance of their being altogether unencumbered with a stamp duty, or any other public restriction, renders their circulation more convenient and general than in any other country.

But to pursue a path calculated to produce these effects, the conductors of public prints ought to be men of talents, learning, and virtue. Under the guidance of such characters, every Gazette would be a source of moral and political instruction, and of course a public blessing.

On the other hand, when an instrument so potent is committed to the weak, the ignorant, and the vicious, the most baneful consequences must be anticipated. When men of small talents, of little information, and of less virtue, undertake to be (as the editors of public gazettes, however contemptible their character, may in a degree be considered) the directors of public opinion, what must be the result? We may expect to see the frivolities of weakness, the errours and malignity of prejudice, the misrepresentations of party zeal, the most corrupt doctrines in politics and morals, the lacerations of private character, and the polluting language of obscenity and impiety, daily issuing from the press, poisoning the principles, and disturbing the repose of society; giving to the natural and salutary collisions of parties the most brutal violence and ferocity; and at length consuming the best feelings and noblest charities of life in the flame of civil discord.

In the former part of the eighteenth century, talents and learning, at least, if not virtue, were thought necessary in the conductors of political journals *. Few ventured to intrude into this ar-

* This has not been, generally, so much the case in America as in Europe. From the earliest period too many of their Gazettes have been in the hands of persons destitute both of talents and literature. But, in later times, the number of

duous office, but those who had some claims to literature. Towards the close of the century, however, persons of less character, and of humbler qualifications, began without scruple to undertake the high task of enlightening the public mind. This remark applies, in some degree, to Europe; but it applies with particular force to America, where every judicious observer must perceive that too many of the Gazettes are in the hands of persons destitute at once of the urbanity of gentlemen, the information of scholars, and the principles of virtue. To this source, rather than to any peculiar depravity of national character, we may ascribe the faults of American newspapers, which have been pronounced by travellers the most profligate and scurrilous public prints in the civilised world *.

editors who fall under this description has become even greater than formerly.

* These considerations, it is conceived, are abundantly sufficient to account for the disagreeable character of American newspapers. In every country the selfish principle prompts men to defame their personal and political enemies; and where the supposed provocations to this are numerous, and no restraints are imposed on the indulgence of the disposition, an inundation of filth and calumny must be expected. In the United States the frequency of elections leads to a corresponding frequency of struggle between political parties; these struggles naturally engender mischievous passions, and every species of coarse invective; and, unhappily, too many of the conductors of their public prints have neither the discernment, the firmness, nor the virtue to reject from their pages the foul ebullitions of prejudice and malice. Had they more diligence, or greater talents, they might render their Gazettes interesting, by filling them with materials of a more instructive and dignified kind; but wanting these qualifications, they must give such materials, accompanied

If the foregoing remarks be just, then the friend of rational freedom, and of social happiness, cannot but contemplate with the utmost solicitude the future influence of political journals on the welfare of society. As they form one of the great safeguards of free government, so they also form one of its most threatening assailants: and unless public opinion (the best remedy that can be applied) should administer an adequate correction of the growing evil, we may anticipate the arrival of that crisis in which we must yield either to an abridgement of the liberty of the press, or to a disruption of every social bond.

with such a seasoning, as circumstances furnish. Of what kind these are, no one is ignorant.

CHAPTER XXIII.

LITERARY AND SCIENTIFIC ASSOCIATIONS.

FOR a long time after the revival of learning in Europe, men devoted to letters were in a great measure insulated with respect to each other. We read, it is true, of a society of learned men, associated for the purpose of promoting literature and science, as early as the time of Charlemagne; but the plan appears to have been rude and defective. Several others were instituted in Italy, in the sixteenth century; still, however, they seem to have been, both in their formation and effects, much inferior to many which have flourished since. The most enlarged ideas of literary societies seem to have originated with the great lord Bacon, who, in his *New Atalantis*, delineated a plan of one more liberal and extensive than had ever before existed. But although his project received little encouragement from his contemporaries, it was destined to produce important effects not long afterward.

In the seventeenth century, the taste for forming scientific and literary societies may be said to have commenced its prevalence, and to have gained considerable ground. It was a little after the middle of that century that the two most conspicuous associations of the kind in Europe, *The Royal Society* of Great Britain, and *The Royal*

Academy of Sciences of France, were formed. The former by Mr. Boyle, Mr. Hooke, and a number of others, who at that time held a high station in the philosophical world; and the latter by Lewis XIV, prompted by the suggestion and assisted by the counsels of his minister, M. Colbert. But the eighteenth century is preeminently remarkable for multiplying these associations; for a great increase in the number of their publications; and for their unexampled activity and usefulness in the cause of science. By far the greater number of the societies for promoting useful knowledge which now exist in the world, were formed during the period under consideration. Among these the most important and useful are the *Imperial Academy* of *Sciences* at *St. Petersburg;* the *Royal Academies* of *Stockholm, Copenhagen, Berlin,* and *Lisbon;* the *Royal Society* of *Edinburgh,* and the *Royal Irish Academy* of *Dublin.* Beside these, a multitude of others have arisen, under different names, for various purposes, and at different periods of the century, in Great Britain, France, Italy, Germany, and almost every literary country of Europe. Perhaps in no part of the world have institutions of this kind been so much multiplied as in Italy; and next to her, in the number and activity of similar associations, we may estimate France. In the former there is scarcely a town of any importance without an academy or literary association; and in the latter they are very numerous.

In addition to the societies formed for promoting general literature and science, the eighteenth century is distinguished by the formation of many

other associations, for promoting some particular art or branch of science. There were instituted, during this period, academies of *Painting*, of *Sculpture*, of *Music*, of *Inscriptions* and *Belles-Lettres*, of *Law*, of *Medicine*, of *Arts* and *Manufactures*, of *Agriculture*, and indeed for cultivating almost every particular department of human art and knowledge.

It was before remarked that the publications made by these societies and academies, exhibiting the result of their labours, were more numerous, more valuable, and more generally circulated, during the eighteenth century, than in any former period. They amount to many hundred volumes, and hold an important place among the literary and scientific productions of the age.

We had occasion to remark, in a former part of this work, that the discoveries in Geography, and the numerous improvements in Navigation, during the last age, had led to a great and unexampled increase of the *intercourse of men*. The same effect has been produced, in modern times, by the formation of so many learned societies, by their great extent, their frequent meetings, their numerous publications, and by their correspondence and mutual interchange of literary honours. Never, assuredly, at any former period, were learned men so well acquainted with the labours and the characters of each other, so free and mutually instructive in their intercourse, or enabled so far to combine their talents and industry in the pursuit of important investigations.

But this is by no means the only advantage of these associations. They may be reckoned among

the principal causes of the superiority of the moderns over the ancients, especially in the physical sciences. They have kindled a spirit of emulation among the learned; they have stimulated into action many useful talents, by holding out literary rewards; and they have suggested objects of inquiry, and methods of experiment, which might otherwise have passed unobserved and forgotten. Such societies, also, have furnished useful repositories for the observations and discoveries of the ingenious, and have thus been enabled to present to the world many valuable productions, which would probably otherwise have been lost through the modesty, the indolence, or the poverty of authors. Literary and scientific associations, moreover, by extending their honours to distant countries, bind more closely together the members of the republic of letters in different quarters of the globe, and teach them to feel as brethren embarked in the same cause. They may even be said, in some instances, to have a great influence in advancing national prosperity, and promoting a spirit of general improvement. It is true, in accounting for these facts, other causes may be assigned which, beyond doubt, contributed to their production; but it can as little be doubted that the increased intercourse and connexion among the learned, by means of the establishment of academies and societies, ought to be considered as holding a place among the most important sources of modern improvements in science.

The formation of literary and scientific associations in the United States began to take place in

the latter half of the eighteenth century. Within that period many useful societies have been instituted which deserve some notice. The principal of these are the following:

1. *Societies and Academies of Arts and Sciences.* Of this class there are several. "*The American Philosophical Society*, held at Philadelphia, for promoting useful knowledge," was instituted in January 1769. It was formed by the union of two smaller societies, which had for some time existed in that city, and has been ever since continued on a very respectable footing. This society has published four quarto volumes of its *transactions*, containing many ingenious papers on literature, the sciences, and arts, which exhibit American talents and industry in a favourable light. Over this institution have successively presided, Benjamin Franklin, David Rittenhouse, and Thomas Jefferson *. *The American Academy of Arts and Sciences*, held at Boston, was established in May 1780, by the council and house of representatives of Massachusetts, "for promoting the knowledge of the antiquities of America, and of the natural history of the country; for determining the uses to which its various natural productions might be applied; for encouraging medicinal discoveries, mathematical disquisitions, philosophical inquiries and experiments, astronomical, meteorological, and geographical observations, and improvements in agriculture, manufactures, and commerce; and, in short, for cultivating every art and science which may tend to

* See Additional Notes, *(I)*.

advance the interest, honour, dignity, and happiness of a free, independent, and virtuous people." This academy has published one quarto volume of its *transactions*, and several parts of a second, which will probably soon be completed. The contents of its respective publications afford a very honourable specimen of learning and diligence in the members, and furnish ground for expectations of still greater utility. The gentlemen who have presided over this association are James Bowdoin, and John Adams *. *The Connecticut Academy of Arts and Sciences* was formed in 1799, at New-Haven, "for the purpose of encouraging literary and philosophical researches in general, and particularly for investigating the natural history of that state." This society has existed so short a time, that no publication of its proceedings, of any extent, could yet be reasonably expected. The gentleman first elected president, and who yet remains in that office, is the rev. Dr. Timothy Dwight, president of Yale college.

2. *Historical Society.* The only association of this kind in the United States is in Massachusetts. It was instituted in the beginning of the year 1791, and the late rev. Dr. Belknap, the honourable judge Tudor, and the rev. Dr. Eliot, are more entitled to the honour of being called its founders than any other individuals †. The

* See Additional Notes, (K).

† Dr. Belknap, whose taste for historical researches is well known and who has rendered such important service to the interests of American history, first urged the adoption of some plan for collecting and preserving the numerous historical documents relating to that country, and especially to New England, which

design of this association is to collect and preserve all documents, either manuscript or printed, which have a tendency to throw light on the natural, civil, ecclesiastical, or literary history of America. It has already made very large and valuable collections, an important portion of which has been laid before the public *, and it bids fair to be one of the most useful institutions in the country †.

3. *Medical Societies.* Prior to the revolution which made the United States free and independent, the physicians of that country afforded little instruction or aid to each other. Scattered over an immense territory, seldom called to confer

were widely scattered, and rapidly falling a prey to the destroying hand of time. He was zealously seconded by judge Tudor, who first proposed the formation of a society for this purpose, and by the rev. Dr. Eliot, who engaged with ardour in the plan, and has been since one of the most active and useful members of the institution. These gentlemen were soon joined, and ably assisted, by the rev. Drs. Thatcher and Freeman, by the honourable judges Sullivan and Minot, Mr. Winthrop, and several others, who were members of the association when first organised.

* The historical documents published by the Society amount to *seven* octavo volumes.

† By far the greater part of the publications made by this society relate to the history of New England. This has arisen, not from any blamable partiality of the *resident* members to the history of their own country; but from the negligence of the *corresponding* members to make communications respecting the several states to which they belong. It is earnestly to be wished, either that gentlemen of a literary character in different parts of the United States would consider the society in Boston as a national one, and exert themselves to render it more extensively useful; or, without delay, form independent societies for the same purpose, to act in cooperation with the parent society.

together and compare opinions, and little habituated to the task of committing their observations to writing, each was compelled to proceed almost unassisted and alone. Soon after the confusion and devastation of war had given way to the arts of peace, attempts began to be made to remedy this serious evil. Associations for the purpose of improving medical science were soon formed, not only in Philadelphia, which had been for some years the seat of a medical school, but in almost every state in the union. Few of these societies have made very large or important publications; but they have produced many lasting advantages to the individuals composing them, and to the interests of the healing art. They have brought physicians to be acquainted with each other. They have collected a large mass of facts, hints, observations, and inquiries, which, if not always given to the world, constitute a source of improvement to the associates themselves. They have instituted annual orations, which, in various ways, tend to promote their primary object. They have issued prize questions, and bestowed premiums, which awaken dormant powers, and excite a laudable spirit of emulation. In a word, they have contributed to raise the practice of medicine in America from a selfish and sordid trade, to a liberal, dignified, and enlightened profession.

4. *Agricultural Societies.* Associations for the promotion of agriculture and the auxiliary arts and sciences, while they have been multiplied in every part of the scientific world, have also, during the latter half of the last century, become

numerous in America. There is scarcely a state in the Union in which an institution of this kind has not been established; and in some of the states there are more than one. The most conspicuous and active of these associations are those established in Massachusetts, New York, and Pennsylvania. That in New York, denominated the *Society for promoting Agriculture, Arts, and Manufactures*, has been particularly distinguished, and, it is believed, is the only one of this nature in the United States which has made a regular publication of its proceedings, and of the principal memoirs communicated by its members *. The useful effects of these institutions are undeniably great in various parts of the country. They have excited a spirit of inquiry, experiment, and diligence, in agricultural pursuits, among a considerable portion of the citizens; they have contributed to raise the dignity and importance of agriculture in the popular opinion; they have collected facts and doctrines, from different districts, for more full trial and satisfactory comparison; and if they have encouraged in any cases a disposition for speculative and visionary farming, they have promoted, in a still greater degree, practical and valuable improvements.

The literary and scientific associations of the eighteenth century differed considerably from those which were formed in preceding times. Be-

* The *Agricultural Society of Massachusetts* the author believes, has published several small works; but he has not been so fortunate as to see them, or to be particularly informed of their contents.

side being more numerous, they were also more *extensive* in their plan, and embraced a greater number of distant and foreign associates; they directed more of their attention to the *physical sciences,* and rendered the mode of inquiry by *experiment* more general and more accurate; and, finally, they were more active in their exertions, kept more heads and hands at work, and engaged more of the public attention, than the societies of preceding times.

CHAPTER XXIV.

ENCYCLOPÆDIAS AND SCIENTIFIC DICTIONARIES.

ALMOST all the works of this kind which exist are productions of the last age. The first attempt of which we read, to give a distinct and methodical view of all arts and sciences, in a series of volumes, was that by Avicenna, the great Arabian philosopher and physician, who flourished in the eleventh century. At the age of twenty-one, as we are told, he conceived the bold design of incorporating into one work all the parts of human knowledge then studied; and, in pursuance of this plan, compiled a real *Encyclopædia*, in twenty volumes, to which he gave the name of *The Utility of Utilities*. The art of printing, however, being then unknown, it is not to be supposed that his work had any considerable circulation, or that it contributed much to the promotion of knowledge.

The next publication of this kind worthy of notice is the *Margarita Philosophica*, by Reischius, a learned German, printed at Strasburg, in 1509. About the same time with Reischius flourished Andrew Matthew Acquaviva, duke of Alti and Teramo, in the kingdom of Naples, who formed a plan of a universal dictionary of arts and sciences, to which he first gave the name of

an *Encyclopædia*, which has been since generally employed to designate works of this class. After Acquaviva, no literary labourer seems to have engaged in so hardy an enterprise, until Alstedius, a German protestant divine, who, in the beginning of the seventeenth century, published an Encyclopædia, which was highly esteemed even among catholics. It was printed at Lyons, and had much circulation over a considerable part of the continent of Europe. These appear to have been the most important, if not the whole, of the works of this kind which appeared prior to the eighteenth century; for the *Dictionaries* of Bayle and Moreri, published towards the close of the preceding age, though works of great labour and learning, yet being chiefly of a biographical and historical nature, can scarcely have a place assigned them, with propriety, in the present list.

About the beginning of the eighteenth century *, Dr. John Harris, an English clergyman of distinguished erudition, published his *Lexicon Technicum*, a work in two volumes folio, embracing a great variety of knowledge as it then stood, and at that period highly instructive and much esteemed. The next compilation of this kind was that produced by Mr. Ephraim Chambers, also of Great Britain, which first appeared in 1728, in two volumes folio, and was doubtless much superior to all that had gone before it.

* It is believed that Dr. Harris's work was first published in 1704, the fifth edition of it is dated 1736.

Chambers denominated his work a *Cyclopædia*. It was the result of many years' intense application to study, and was received by the public in the most favourable manner. It went through a number of editions within a few years after its first appearance, was soon translated into the Italian language, and had many honours heaped upon it by the learned of those times. This work has been since enlarged, and printed in four volumes folio, by Dr. Rees, and in this improved form is much valued.

The next in order was a *Dictionary of Arts and Trades*, published by a society in France, and embracing an amount of information on all mechanical subjects, more extensive and curious than had ever before been collected. This was followed by the celebrated French *Encyclopédie*, of which Messrs. d'Alembert and Diderot were the principal conductors, aided by a number of their learned countrymen. It is probable that they were prompted to this undertaking by the fame and success of Mr. Chambers's work, and also by a premeditated and systematic design to throw all possible odium on revealed religion. This great compilation was begun in 1752, and brought to a close about fifteen or twenty years afterward, in thirty-three folio volumes. A leading feature of the *Encyclopédie* is the encouragement which it artfully gives throughout to the most impious infidelity; and though much valuable science is undoubtedly diffused through its pages, yet it is so contaminated with the mixture of licentious principles in morals and religion, that nothing but its great voluminousness prevents

it from being one of the most pernicious works that ever issued from the press.

After the appearance of the French *Encyclopédie*, baron Bielfield, of Germany, published a work which he called *The Elements of Universal Erudition.* This compilation, however, is comparatively little known, and is certainly inferior to many made both before and since. About the year 1760, a bookseller of the name of Owen published a kind of *Encyclopædia* in four very large octavo volumes. This work, though less full on many subjects than some that had gone before it, yet contained much useful information, the mode of exhibiting which has been generally applauded. In 1764 appeared *The Complete Dictionary of Arts and Sciences*, in three volumes folio, by the rev. Henry Temple Croker, and others. This work gained no reputation.

About the year 1773 was published, in Edinburgh, the *Encyclopædia Britannica*, in three volumes quarto, of which the principal editor was Mr. Colin Mac Farquhar, assisted by a number of the learned men around him. A second edition of the same work was completed in 1783, enlarged to ten volumes quarto, executed chiefly by the same persons who had compiled the former edition. A third impression, still under the same title, was undertaken in 1789, with the aid of a number of new literary labourers, and completed in 1797, in eighteen quarto volumes. This work deserves to be highly commended on various accounts. The friendly aspect which it bears in general toward religion and good morals, is entitled to much approbation: and though,

on some subjects, it is far from containing the same depth and extent of scientific research with the French *Encyclopédie*, yet it presents a rich variety of knowledge, and in the general usefulness of its tendency far exceeds that celebrated performance.

From the last edition of the *Encyclopædia Britannica*, an American impression has been given by Mr. Thomas Dobson, a respectable printer and bookseller of Philadelphia, who, with a degree of zeal and enterprise then altogether unrivalled in the United States, soon after the commencement of the publication in Britain, announced his intention of giving it to the American public through the medium of his own press. His plan has been executed in a manner equally honourable to himself and his patrons; and his edition, on account of many valuable additions and corrections, deserves to be considered as decidedly superior to that from which the greater part of it was copied*.

In 1783 some of the literati of France, not satisfied either with the plan or the execution of the grand *Encyclopédie*, which had attracted so much of the public attention, commenced a new work under the title of the *Encyclopédie Méthodique*. This has been, with some propriety, called a *Dictionary of Dictionaries*. It is entirely on a new plan, and was lately finished, having reached the wonderful extent of *two hundred volumes* in quarto. It is scarcely necessary to say, that this

* Beside other new matter, Mr. Dobson's edition contains much important information respecting the United States not contained in the work as it came from the British press.

last work, executed by many of the persons who were engaged in the preceding, bears, like that, an antireligious complexion; and that, while it displays much genius, learning, industry, and perseverance, its general tendency is highly unfavourable to the interests of virtue and piety.

Some years before the close of the eighteenth century, a Dictionary of Arts and Sciences was undertaken by Varrentrapp and Wenner, learned and enterprising booksellers at Frankfort, in Germany. This work, under the title of *Allgemeine Encyclopædie dér Künste und Wissenschaften*, has already reached to a considerable extent, but is not yet completed. It has been said, by persons acquainted with the German language, to be, on the whole, so far as it has gone, the best *Encyclopædia* yet published.

Several other compilations, intended to embrace the circle of arts and sciences, were made in different parts of Europe, in the course of the last century. Some of these were translations or abridgements of those already mentioned, while others had better claims to originality. But too little is known of those which belong to either class, to undertake any detailed account of their characters, or even of their titles *.

* The *English Encyclopædia*, begun a few years ago, and intended to be comprised in eight or nine volumes 4to, was nearly concluded at the close of the century. The *Encyclopædia Perthensis*, which has been for several years printing in Perth, is also still unfinished; as is an *Encyclopædia* publishing by Mr. John Low, an enterprising bookseller in the city of New York, in America, in which considerable progress is made, and which it is expected will form six quarto volumes.

It deserves also to be noticed, that the last age produced an unprecedented number of systematic works on particular sciences, exhibited in the form of *dictionaries*, and having the several parts disposed according to alphabetical arrangement. Of these the number is too great to be recounted. As a specimen, it may be observed, that we have dictionaries of *Agriculture*, by several associations and individuals; of *Gardening*, by Miller, Mawe, and others; of *Trade* and *Commerce*, by Savary, Postlethwaite, and Rolt; of *Law*, by Jacob; of *Mathematics*, by Hutton; of *Chemistry*, by Macquer and Nicholson; of *Mineralogy*, by Rinman; of *Botany*, by Martyn; and of *Painting*, *Music*, &c., by various persons of learning and taste, in different parts of the world.

That these numerous and extensive collections of the different branches of human knowledge have had a considerable influence on the literary and scientific character of the age, will scarcely be questioned. They have contributed to render modern erudition multifarious rather than deep. By abridgeing the labour of the reader they have diminished his industry. But they have been attended, at the same time, with considerable advantages. To those residing at a distance from large libraries, and other repositories of science, they have furnished a very instructive epitome of knowledge. They have thus contributed to enlarge the mind, and to show the connexion between the several objects of study; and though they are far from presenting a sufficiently minute and detailed view of each of the various subjects of which they treat; yet, to general readers, they

give more information than would probably have been gained without them; and to readers who wish to investigate subjects more deeply, they serve as an index to more abundant sources of information.

CHAPTER XXV.

EDUCATION.

EDUCATION has always been considered among the most difficult and important of those duties which are intrusted to man. Corresponding with its arduous and interesting nature have been the numerous plans to facilitate its accomplishment, or to improve its methods. Of these plans the eighteenth century was eminently productive, as no age ever so much abounded in learned and ingenious works on this subject; but the real improvements to which the period in question has given birth, in the business of education, are by no means of that radical kind which might have been expected by the sanguine, from the progress of society in other arts and sciences. Still, however, the last age produced some events and revolutions, with regard to this subject, which demand our notice in the present brief review.

Of the numerous treatises on the subject of education, which were presented to the public in the course of the last age, there are few entitled to particular attention. Among these, perhaps the celebrated work of Rousseau, under the title of *Emilius*, is most extensively known. This singular production undoubtedly contains some just reasoning, many excellent precepts, and not a

few passages of unrivalled eloquence. But it seems to be now generally agreed by sober reflecting judges, that his system is neither *moral* in its tendency, nor *practicable* in its application. If the author excelled most other men in genius, he certainly had little claim either to *purity* of character, or real *wisdom*.

Beside this work, a few others are worthy of particular notice; some of which, if they have less claim to ingenuity than the celebrated production of Rousseau, are more judicious, practical, and conducive to the happiness of youth. The *Method of studying and teaching the Belles Lettres*, by M. Rollin, has received much attention and general applause, and is preeminently favourable to the interests of virtue and piety. The *Plan of a Liberal Education*, by Dr. Vicesimus Knox, is also the production of a learned and ingenious man, and may be ranked among the best modern treatises on this subject. The *Elementar-Werk*, by Basedow, of Germany, is said to be one of the most influential and useful works on education that the age produced. Much praise has also been bestowed on the *Neuen Emil* of professor Feder, of Göttingen, which still continues to be held in esteem in the author's own country *. Towards the close of the century

* The author has no acquaintance with the works of Basedow or Feder. This account of them is taken from a learned and interesting *Historical Account of the Rise and Progress of Literature in Germany*, published in the German Museum of London, and said to be drawn up by the rev. Mr. Will, lately of London, at present minister of the German Calvinist church in the city of New York.

was published a work entitled *Lectures on Education*, by David Williams, which, though it manifests considerable talents and erudition, is decidedly unfriendly to religion, and consequently to genuine virtue. To these may be added, the *Theatre of Education*, by madame Genlis; *Practical Education*, by Mr. and miss Edgeworth; and treatises on the same subject by Mrs. H. More, and miss Hamilton, which have been much read and esteemed.

The eighteenth century produced a remarkable revolution with respect to the *objects of study* in the education of youth. These are now more accommodated to the different employments for which the pupils are intended than in former times. Education, during this period, has been more than ever divested of its scholastic form, and rendered more conducive to the useful purposes of life. The study of the dead languages has been gradually declining throughout the age under review, and scientific and literary pursuits of a more practical nature taking their place. Instead of spending eight or ten years, as formerly, in the acquisition of Latin and Greek words and rules, youth are now more liberally instructed in the physical sciences, in *belles lettres*, in modern languages, in history, in geography, and generally in those branches of knowledge which are calculated to fit them for action, as well as speculation. Though the change in this respect has been carried to an extreme; though the disposition discovered by many instructors, during the last fifty years, to discard

entirely from among the objects of study the rich stores of ancient literature, may be pronounced unfriendly to true taste and sound learning; yet the revolution which has been mentioned may be considered in general as a real improvement.

Another obvious revolution which the last age has produced in the business of education, is removing a large portion of that *constraint* and *servility*, and of those *monkish habits*, which were formerly connected with the diligent pursuit of knowledge, and considered a necessary part of a system of study. Modern academic discipline is much less rigid than it was a century ago: more scope is given to the natural spirit and tendencies of the youthful mind: the paths of instruction are more diversified, and more strewed with flowers: in a word, the *labour* of youthful study, formerly fashionable, has in a great measure ceased to exist. This has arisen from several causes; from the growth of luxury and dissipation, which are always unfavourable to sound erudition; from the multiplication of *helps* and *abridgements*, to be hereafter mentioned, which, while they lessen the toil of the student, deceive him, by promising greater acquisitions than he can gain from them; and especially from the plans of education in modern times being so much extended, and the objects of study so greatly multiplied, as to render the wonted attention to each difficult, if not impossible. Hence the greater number of scholars, at the present day, are more remarkable for *variety* than *depth* of learning; and have generally contented themselves with walking

lightly over the fields, and plucking the flowers of literature and science, instead of digging deeply, and with unwearied patience, to gain the recondite treasures of knowledge *.

A further circumstance, in some degree peculiar to modern education, and which no doubt produces a considerable effect, is the *early age* at which students are admitted into the higher seminaries of learning, and, as a necessary consequence, their premature entrance into the world. Lord Bacon somewhere remarks, that it was a defect in the plans of education, in his day, that students were introduced at too early an age to the more abstruse and grave parts of their philosophic studies. This remark, in the eighteenth century, may be applied to the general period of beginning the academic course. The universities and colleges of modern times, especially in the United States, are filled with *children*, who are unable either suitably to appreciate the privileges they enjoy, or so much to profit by them, as at a more mature period of life. If these higher seminaries be intended, as they commonly are, to complete the education, then to send pupils to them before they

* It has been asserted by good judges, and probably with truth, that one of the principal reasons to be assigned for the comparative superficiality of modern classical learning, even in the best seminaries, is the increased use of *translations*, particularly within the last sixty or seventy years. It is certain that helps of this kind, to abridge the toil of the indolent and careless, never before had so general a circulation; and it is proverbially true, that acquisitions made by means of long and patient *labour* are more deeply impressed on the mind, longer retained, and usually held in higher estimation, than those which cost but little time and pains.

have emerged from the state of childhood is altogether unwise. That this circumstance has an unfavourable influence on the dignity and general success of a course of public instruction can scarcely be doubted. That it should cooperate with other causes to render the number of superficial scholars greater than they would otherwise be, seems to be an unavoidable consequence; and that it tends to diminish the subordination and the regularity of modern academic systems, experience abundantly demonstrates.

The last century also produced considerable improvements in the *means* of instruction. These are of various kinds, and deserve our particular attention, in estimating the progress of literature during the period under consideration.

The first circumstance deserving of notice under this head is the *great multiplication of Seminaries of learning*, in the course of the last age. This is a very interesting feature in the period which we are endeavouring to delineate. Institutions for the purpose of instruction, from universities down to the smallest schools, were never half, perhaps not a tenth part, so numerous as at the close of the eighteenth century. In every portion of the civilised world they have increased to an astonishing amount; they have brought the means of education to almost every door; and, with opportunities, have presented excitements to the acquisition of knowledge before unknown.

Charity Schools, if not first established, were greatly multiplied during this century; and perhaps deserve to be considered as one of the most useful plans of public beneficence to which the

age gave rise. These have been numerous for many years in several countries of Europe; but probably in no part of the world have so large a number been established, and on a footing so liberal, as in Great Britain. Institutions of this kind have also been for some time common and highly useful in the United States.

The establishment of *Sunday Schools* deserves to be mentioned as a further improvement of modern times. This is an excellent plan for disseminating the elements of useful knowledge among the more laborious and indigent portions of society; and bids fair to be generally adopted throughout the Christian world.

The last age also abounded, beyond all precedent, in *popular works*, for facilitating and improving the education of youth. Of this kind are the numerous *translations*, *compends*, and *abridgements*, which modern instructors have produced. Scarcely a department of art, science, or taste, can be mentioned, in which numerous works of this nature have not been furnished by the friends of youth. To the same class also belong the *moral tales*, the *histories*, *adventures*, and *selections*, of which a few years past have produced an unexampled number and variety. Some of these performances have been planned with great wisdom, and executed with great felicity; and are eminently suited to attract the youthful mind, to direct and strengthen its growing powers, to beget a taste for the sciences, and to cultivate the best principles of the heart. Of many others, indeed, a very different character must be given; but it is certain that parents and teachers were never be-

fore presented with so rich a variety of helps, or so ample a field of choice, in works of this nature, as during the last thirty years of the period under review.

Among the many writers and compilers to whom the public are indebted for their labours in this important field, it is not difficult to make a selection of those who are most entitled to praise. Of this number are Mrs. Barbauld, Mrs. Trimmer, Dr. Percival, Mrs. C. Smith, miss Hannah More, Mrs. Wakefield, Mr. Day, Dr. Aikin, and miss Edgeworth, of Great Britain; madame Genlis, abbé Gaultier, M. de Beaumont, and M. Berquin, of France; Messrs. Basedow, Campe, Salzmann, and von Rochow, of Germany; and Mr. Lindley Murray, and Mr. Noah Webster, of America. To say that the performances of all these have commanded much attention, and that those of several of them have been eminently and extensively useful, would be to describe their merits in a very imperfect manner.

From this multiplication of the *means* and *facilities* of education we may account for the fact, that during the last century the advantages of education were *more extensively diffused through the different ranks of society* than in any former age. It may safely be asserted, that there never was a period in which the elements of useful knowledge were so common and popular as during that which is under review. In all preceding stages of human improvement, knowledge was possessed by a few. Before the invention of printing, indeed, the obstacles in the way of a general diffusion of information were numerous, and almost insurmountable; and even with the advantage of that inven-

tion, it was in a great measure confined to the opulent, until within the last hundred years. During this period, the great increase in the number of seminaries of learning; the wonderful multiplication of circulating and other libraries; the growing practice of divesting the most important parts of knowledge of their scholastic dress, and detaching them from the envelopments of dead languages; with various other considerations; have all conspired to extend the advantages of education, and to render the elements of useful knowledge more cheap and common than ever before.

Towards the close of the eighteenth century, the *physical* education of youth became an object of more particular attention than in any former period. The considerations of bodily health and vigour were by no means forgotten in the most ancient systems of education with which we are acquainted. Perhaps it may be asserted, that, in *practice*, the ancients succeeded much better than the moderns in rearing robust and vigorous children: but they attended less to *theory* than *practice*; they attained the *end* without having just philosophical ideas respecting the *means*; and sometimes indeed by methods which neither the habits nor the opinions of modern nations would admit. But the eighteenth century gave birth to more speculation and writing on this subject than any former age could boast. The *philosophy* of physical education has been more studied, discussed, and understood. And though the luxury, the various premature indulgences, and the general habits of youth at the present day,

may be considered as peculiarly unfriendly to health and long life, yet it is certain, that, within a few years past, the inquiries on this subject, and the theoretical and practical works in relation to it published, have been more numerous, more enlightened, and more conducive, so far as reduced to practice, to the union of health, delicacy, and virtue, than the wisdom of former ages produced *.

But perhaps one of the most striking peculiarities of the eighteenth century, on the score of education, is the change of opinion gradually introduced into society respecting the importance, capacity, and dignity, of the *female sex*, and the consequent changes in the objects, mode, and extent of their instruction. It is much less than a hundred years since female education was lamentably, and upon principle, neglected throughout the civilised world. Until the age under review, "no nation, ancient or modern, esteemed it an object of public importance; no philosopher or legislator interwove it with his system of general instruction; nor did any writer deem it a subject worthy of full and serious discussion. Many systems of instruction have been adopted for the other sex, various as the countries, the govern-

* Some of the methods employed by the ancients, for promoting the expansion, vigour, and longevity, of the human body, were by no means consistent with delicacy or virtue, especially in the case of the female sex. In modern times, by more carefully studying and more generally understanding the philosophy of diet, exercise, air, dress, and general regimen, the improvers of physical education have been enabled to do much in a way altogether consistent both with decorum and pure morals.

ment, the religion, the climate, and even as the caprices of the writers who at different periods have undertaken to compose them. But, by a strange fatality, women have been almost wholly omitted in the account, as if they were not gifted with reason and understanding, but were only to be valued for the elegance of their manners, the symmetry of their forms, and the power of their blandishments." In the history of the earliest nations, we occasionally meet indeed with accounts of females who had elevated and powerful minds, and who were well informed for the period in which they lived. In the history of Europe, during the sixteenth and seventeenth centuries, we also find a few instances of distinguished women, some of whom, in talents, learning, and virtue, have perhaps never been excelled since that period: but the number of this description was so inconsiderable, the circumstances in which they were placed were so peculiar, and the influence of their character and example so small, that they scarcely form exceptions to the general statement which has been given. The great mass of the sex still remained unacquainted with letters and science; their whole attention being directed either to the allurements of personal decoration, or to the details of domestic economy.

The eighteenth century produced a memorable change of opinion and of practice on this subject. The character and talents of the female sex have become during this period more highly estimated, their importance in society better understood, and the means of rendering their salutary influence more familiarly known and adopted;

in short, a revolution radical and unprecedented, with respect to their treatment and character, has taken place, and wrought very perceptible effects in society. Female education has been more an object of attention, and been conducted upon more liberal principles within the last thirty years, in every cultivated part of Europe, and in America, than at any former period. Some of the ablest pens have been employed in prescribing plans for the cultivation of their minds; seminaries of learning, particularly adapted to their advantage, have been instituted; women have of course become, in general, better informed; the sex has furnished more instances of learning and talents than ever before; a female of elevated understanding, and of respectable literary acquirements, is no longer a wonderful phenomenon. Corresponding to the increase of cultivation bestowed upon them, they have risen higher in the scale of intellect, and evinced a capacity to vie with the other sex in literature, as well as moral excellence. In a word, at the close of the eighteenth century it had become as rare and disgraceful for a woman to be ignorant, within certain limits, as at the commencement of it such ignorance was common.

As there is no truth more generally admitted, than that every step in the progress of civilisation brings new honour to the female sex, and increases their importance in society; so there is, perhaps, no fact which better establishes the claim of the eighteenth century to much progress in knowledge and refinement, than the improvements in female education to which it has given rise. It is a pro-

minent feature in the age, and forms one of its signal honours, that its close found the female sex, through a great part of the civilised world, more generally imbued with the elements of literature and science, than they ever before were since the creation.

The learning of the female world, in the period under review, may be considered as bearing some peculiarity of character. What might have been the nature or extent of the attainments made by literary women in ancient Egypt, Greece, and Rome, we are scarcely qualified to judge; but the learned women of Europe, in the sixteenth and seventeenth centuries, according to the fashion of the day, entered deeply into the study of ancient languages*; they chiefly belonged to the higher ranks of life; and as writing and publishing were comparatively rare among all classes, so few females presented themselves before the public in this manner. In the eighteenth century

* Lady Jane Gray, who lived in the sixteenth century, was a proficient in classic literature. "She had attained a familiar knowledge of the Latin and Greek languages, beside modern tongues; had passed most of her time in an application to learning, and expressed a great indifference for other occupations and amusements usual with her sex and station. Roger Ascham, having one day paid her a visit, found her employed in reading *Plato*, while the rest of the family were engaged in hunting in the park; and on his admiring the singularity of her choice, she told him that she received more pleasure from that author than the others could reap from all their sport and gayety." *Hume.* Queen Elizabeth was no less remarkable for her learning. She is said to have spoken both Greek and Latin with readiness, and to have been familiarly acquainted with the French, Italian, and Spanish languages. Other instances of the same kind might be adduced as belonging to that age.

the character of female learning became materially different. Literary females, during this period, paid more attention to general knowledge, not omitting some of the practical branches of physical science. In studying languages, they devoted themselves more particularly to modern tongues, especially the French, Italian, and German*. Literature has descended from females of high rank to those in the middle walks of life, and is perhaps, on the whole, more frequent among the latter than the former. And while learned women of former times wrote and published little, those of that sex who have lately gained literary distinction have been the authors of numerous and valuable publications†, some of which will doubtless descend with honour to posterity.

* A few females of the eighteenth century distinguished themselves by their profound and accurate acquaintance with the Latin and Greek classics. The names of madame Dacier, Mrs. Grierson, Mrs. Carter, and a few others, will be remembered with respect as long as the ancient languages are studied. But there was certainly less disposition among the literary females of the eighteenth century to devote themselves to this pursuit than among those of the two preceding centuries.

† "In this country," (England) says Mr. Polwhele, in his *Unsex'd Females*, "a female author was formerly esteemed a phenomenon in literature; and she was sure of a favourable reception among the critics, in consideration of her sex. This species of gallantry, however, conveyed no compliment to her understanding. It implied such an inferiority of women in the scale of intellect as was justly humiliating: and critical forbearance was mortifying to female vanity. At the present day, indeed, our literary women are so numerous, that their judges, waving all complimentary civilities, decide upon their merits with the same rigid impartiality as it seems right to exercise towards the men. The tribunal of criticism is no longer charmed

This revolution has been gradually effected, and was produced by a variety of causes. The progress of refinement, while it raised the female character, naturally placed that sex in a situation more favourable to the acquisition of knowledge. The unexampled diffusion of a taste for literature through the various ranks of society could scarcely fail of increasing the intelligence, and meliorating the education, of females among the rest. Added to these considerations, the example and the writings of some celebrated women served to excite emulation, and to produce a thirst for knowledge among many others of their sex; these latter, again, within the sphere of their influence, produced the same good effects on their associates; academies for the particular instruction of females soon became popular; and thus, within the last fifty years, their literary interests have been constantly gaining ground.

Among the numerous females, whose names might be mentioned as having contributed to this revolution by their example and their writings, particular distinction is due to Mrs. Cockburn *, Mrs. Carter †, Mrs. Barbauld, Mrs. Lennox, Mrs. Montague, Mrs. Macaulay Graham, Mrs. Cha-

into complacence by the blushes of modest apprehension. It no longer imagines the pleading eye of feminine diffidence, that speaks a consciousness of comparative imbecility, or a fearfulness of having offended by intrusion."

* An acute and celebrated metaphysician, who died in 1749. Her works have been since printed in two volumes octavo.

† Elizabeth Carter, a lady of great erudition, and of distinguished talents. Her translation of *Epictetus* is generally known.

pone, Mrs. Radcliffe, miss Hannah More, miss Seward, Mrs. d'Arblay, Mrs. Charlotte Smith, miss Edgeworth, miss Hamilton, miss Wakefield, and many others, of Great Britain; Mrs. Grierson *, and Mrs. Sheridan, of Ireland; madame Dacier, and madame Chatelet †, of France; together with many more ‡, worthy of respectful notice.

The extension and improvement of female education has also been promoted by the writings of archbishop Fenelon, Dr. Gregory, Dr. Fordyce, Mr. Bennet, Dr. Darwin, and some others. Even the celebrated work of Rousseau has contributed to this end, notwithstanding the visionary and erroneous principles with which it abounds.

But while female talents have been more justly appreciated, and more generally improved, espe-

* Mrs. Constantia Grierson descended from very poor and illiterate parents, in the county of Kilkenny, in Ireland. She was born in the year 1706, and died in 1733, in the 27th year of her age. She was profoundly acquainted with Grecian and Roman literature; published editions of *Terence* and *Tacitus*, which are among the best extant; and addressed an elegant Greek epigram to the son of lord Carteret, by whose influence her husband procured a patent to be the king's printer for Ireland, on condition that the life and character of Mrs. Grierson should be inserted in it, as a monument in honour of her learning.

† The numerous and profound works of madame Dacier, in classic literature, are well known; as are also the talents and learning of madame du Chatelet, the able commentator on Newton.

‡ To this list may be added the names of the margravine of Anspach, Mrs. Dobson, Mrs. Brooke, Mrs. Cowley, Mrs. Yearsley, Mrs. Inchbald, Mrs. West, miss Lee, Mrs. Trimmer, miss H. M. Williams, and several others, distinguished in the walks of polite literature; and also the honourable Mrs. Damer, Mrs. Francis, and Mrs. Thomas, celebrated for their acquirements in the ancient languages.

cially during the latter half of the eighteenth century, certain extravagant and mischievous doctrines relating to that sex have arisen within this period, and obtained considerable currency. These doctrines are the following, viz. "That there is no difference between the powers and tendencies of the male and female mind; that women are as capable of performing, and as fit to perform, all the duties and offices of life, as men; that their education should be the *same* with that of the men; in a word, that, except in the business of *love*, all distinctions of sex should be forgotten and confounded." These opinions, if not wholly new, and peculiar to the last age, have doubtless obtained a currency, within a few years past, which they never before had, and which has produced much interesting discussion, and very sensible effects in society.

The most conspicuous advocate of these opinions is the celebrated Mary Wollstonecraft, whose ingenious vindication of the *Rights of Woman* is universally known. In her principles on this subject she has been followed by several of her own sex, as well as by a few male writers. To the former class belongs Mary Hays, who, in her *Novels* and *Philosophical Disquisitions*, has endeavoured, with great art and plausibility, to recommend the principles of this mischievous school.

It cannot be denied, that a total mistake concerning the capacity and importance of the female sex has long held that part of our species under a very degrading thraldom, and obscured the portion of intellectual and moral excellence, which

they possess. It may also with truth be granted, that the idea of an *original* difference between the mental characters and powers of the two sexes has been pushed greatly too far, and been made a source of long-continued and essential injury to women. Females, if it were practicable or proper to give them, in all respects, the same education as that bestowed on men, would probably discover nearly equal talents, and exhibit little difference in their intellectual structure and energies. But is it possible, or consistent with the obvious indications of nature, to give them *precisely* the same education as is given to the male part of our species? That this is neither practicable nor desirable will appear from the following considerations.

First. Women are obviously destined to *different employments and pursuits* from men. This is evident from various considerations. Among all the classes of animals with which we are acquainted, the female is smaller, weaker, and usually more timid than the male. This fact cannot be ascribed to difference of education, to accident, or to perverted systems of living among the inferior animals; for it is uniform, and nearly, if not entirely, universal, applying to all countries, climates, and situations; and if ever we may expect to find nature pure and unperverted, it must be among the brutal tribes. The same fact applies to the human species. The bodies of women in general are smaller and feebler than those of men, and they are commonly more timid. This is not merely the case in the more polished states of society, in which false refinement, or injurious

habits, may be supposed to have degraded the female character; but it is nearly if not equally so among savages, where women, instead of being wholly or chiefly sedentary, are rather the more laborious sex. How shall we account for this fact? Does it not seem to indicate a difference of employment and destination? Is it conceivable that there should be so much difference of structure between beings intended for *precisely the same sphere of action?* No one can suppose this, who believes that the various departments of nature are all formed by a Being of infinite wisdom, and that in the economy of creation and providence means are adjusted to ends.

Again; the important offices of *gestation* and *parturition* being assigned to women, plainly point out the difference of situation, pursuit, and employment, for which we are contending. The various circumstances of infirmity and confinement resulting from these offices present insurmountable obstacles in the way of that sex engaging in many employments destined for men. If all distinctions, except in the business of love, ought to be confounded, then females ought to be called to sit on the bench of justice, to fill the seats of legislation, to hold the reins of executive office, and to lead the train of war. But would such a kind of activity as any of these stations suppose, comport with their sexual duties? The slightest reflexion, it is presumed, will be sufficient to convince every unprejudiced inquirer, that there is a total incompatibility between them.

Secondly; To make the education and the em-

ployments of the two sexes precisely the same, would, if practicable in itself, be productive of the most *immoral consequences.* Let us suppose young females to mingle promiscuously with the youth of the other sex, in their studies, in their amusements, and in all the means adopted to strengthen the bodies and the minds of each. Let us suppose, that after the elements of knowledge were acquired, the same employments were assigned to each sex. Let us suppose the various stations of civil trust to be filled indifferently by men and women; the places destined for the instruction of lawyers, physicians, and surgeons, to be occupied by a jumbled crowd of male and female students; the clerkships in counting-houses, and public offices, executed by a joint corps of male and female penmen; and the bands of labourers in manufactories formed without any distinction of sex. What would be the consequence of these arrangements? It would convert society into hordes of seducers and prostitutes. Instead of the regularity, the order, the pleasing charities, and the pure delights of wedded love, a system of universal concubinage would prevail. Seminaries of learning would be changed into nurseries of licentiousness and disease; the proceedings of deliberative assemblies would be perverted or arrested by the wiles of amorous intrigue; the places of commercial or mechanical business would become the haunts of noisy and restless lewdness; and all sober employment would yield to the dominion of brutal appetite.

Let us take a retrospect of those countries and

ages, in which the intercouse of the sexes, with respect to violations of what are commonly called the laws of decorum, came nearest to the pcint of freedom here recommended. In the ancient gymnastic exercises, it is well known, that the young women were obliged to run, to wrestle, to throw quoits, &c., and in these exercises to appear naked, as well as the men; and at their feasts and sacrifices, they were also obliged to dance, in the same state of perfect nudity, amid crowds of male spectators. What was the consequence of these proceedings? According to the doctrine under consideration, such freedom in exposing the naked limbs, and those parts of the body which are generally concealed, ough to have rendered the people who indulged in these habits the most virtuous in the world, with regard to the intercourse of the sexes. But was this really the consequence? Directly the reverse! The exercises in question were converted into occasions of wantonness and libertinism so gross and flagitious, that they became subject of universal complaint, and filled even pagans with horrour.

The truth is, wherever the intercourse of the sexes has been most guarded, and the fences of delicacy and modesty most carefully kept up, there the highest degree of virtue and order has invariably prevailed. It is so far from being a correct opinion, that throwing off reserve is the best way to prevent corruption, that uniform experience proves this course to be the most mischievous and corrupting that can be imagined. There is no way of avoiding this consequence, but by main-

taining, that many things which Christianity, and those who take their standard of morality from it, pronounce vicious, are really innocent, if not laudable.

Thirdly; To defend the system which would confound all distinctions of sex, except in the busness of love, is as *opposite to the spirit of Christianity*, as it is inconsistent with the pursuits of the female sex, and immoral in its consequences. Those who are familiar with the scriptures will recollect, that a line of distinction between the sexes is frequently and carefully drawn therein, and an habitual reference to this distinction represented as highly important in the system of human duty. Upon this distinction, considered in several points of view, are founded some of the most interesting conjugal obligations, and all the leading principles of domestic government. The scriptures indeed do not exhibit woman as an enslaved and servile being; they represent her as a rational and immortal creature, as the counsellor, companion, and helpmate of men, and teach us, both by precept and example, to consider her as holding a high and respectable station in society: but they exclude her, by direct prohibition, from the office of public religious instructor, and plainly intimate, that several other employments and pursuits are unfit to engage her attention. In short, they distinctly and unequivocally hold up the idea of an appropriate sexual character, and represent a corresponding peculiarity of studies and action as properly belonging to the male and female.

It is evident then, from reason, from the uni-

form course of nature, from experience, and from the word of God, that females are destined for different pursuits and employments from men, and that the sphere of their activity should be different. This, of consequence, will call for a different education, will lead to different habits, and will give rise to distinguishing characteristics. Do not the professional employments of men every day beget observable peculiarities of character and taste? And is it not perfectly natural, on the same principle, that there should be *sexual* peculiarities? Nor is there any necessity for supposing a radical inferiority of intellectual power in females. It will be readily granted, that with the same *kind*, and with the same *degree*, of cultivation with men, they would exhibit equal capacity of mind. But the necessary reserve of the female sex, their domestic duties, their sedentary life, the infirmities and confinement resulting from the peculiar sexual offices before alluded to, and the various peculiarities of their situation, are abundantly sufficient to produce in them a different genius and character of mind from those of men, whose active employments, daring enterprises, aspiring ambition, diversified scenes and occupations, familiarity with danger, and unceasing labours to gain fame, wealth, or pleasure, impart to their minds a vigour, a courage, a solidity, a wariness, and a persevering patience in exertion, which are rarely found in women *.

* Miss Hannah More, in one of her Essays, seems to admit the idea of an *original inferiority* of mental character in females. She expresses herself in this manner: "Women have generally quicker perceptions; men have juster sentiments. Women con-

What, then, is the conclusion of the matter? It is, that women, as well as men, are rational beings; that they are made not to be the servants but the companions of men; that for this purpose, where it is practicable, their minds should be cultivated with care, liberally imbued with knowledge, and so strengthened and polished as to fit them to shine, not only in the routine of domestic employments, but also in the social circle, and in literary conversation. Every man who understands the true interests of society will desire to

sider how things may be prettily said; men, how they may be properly said. Women speak, to shine or please; men, to convince, or confute. Women admire what is brilliant; men, what is solid. Women prefer a sparkling effusion of fancy to the most laborious investigation of facts. In literary composition, women are pleased with antithesis; men, with observation and a just deduction of effects from their causes. In Romance and Novel-writing women cannot be excelled. To amuse, rather than to instruct, or to instruct indirectly, by short inferences drawn from a long concatenation of circumstances, is at once the business of this sort of composition, and one of the characteristics of female genius. In short, it appears, that the mind, in each sex, has some natural kind of bias, which constitutes a distinction of character; and that the happiness of both depends, in a great measure, on the preservation and observance of this distinction."—Essay, p. 9—13. In the sentiment here expressed, I cannot altogether agree with this excellent and illustrious woman. That there is some such difference as she has stated between the sexes, I am ready to allow; but this appears to me to arise not so much from any *original inferiority* in the structure of the female mind, as from a difference of education and employment; from a difference in the circumstances in which women are placed in society, with respect to inducements to action, the nature of their amusements, *&c.*; a difference which is necessary and proper, and which to set aside, would be to derange the order, and destroy the happiness of society.

see females receive the best education which their circumstances will afford. And every one who considers the importance of enlightening and forming the minds of the young, and who recollects that this task must, for a number of the first years of life, be almost entirely intrusted to mothers, will perceive the propriety of having them more accurately and extensively informed than they commonly are, But when women carry the idea of their equality with the other sex so far as to insist, that there should be *no difference* in their education and pursuits; when they contend that every kind of study or occupation is equally fit and desirable for them to pursue as for men *; when they imagine and act on the presumption, that they have talents as well suited to every species of employment and enterprise; they mistake both their character, their dignity, and their happiness. The God of nature has raised everlasting barriers against such wild and mischievous claims. To urge them is to renounce

* It is by no means the intention of the writer to say, that the profound investigations of mathematical or metaphysical science are unfit for *all* females. Where persons of this sex are so circumstanced, with regard to property and employment, as to render investigations of this kind convenient and agreeable, there appears no rational objection to their engaging in them. But when females devote themselves to studies of this nature, to the neglect of religious and moral improvement, which are indispensably necessary for every sex and age; and to the omission also of geography, history, chemistry, and some of the more attractive branches of natural history, if they do not depart from the province of their sex, they certainly have a singular taste as to what is most useful and most ornamental in females, situate as they are in society.

reason; to contradict experience; to trample on the divine authority; and to diminish the usefulness, the respectability, and the real enjoyment of the female sex.

The increased intelligence and the taste for reading, which remarkably characterise the female sex of the present day, compared with their condition a century ago, are attended with some circumstances, which the friends of virtue and happiness cannot contemplate with unmingled pleasure. By far too great a portion of the reading of females is directed to *Novels*, and other productions of light and frivolous character, which at best can only amuse, and which often exert a corrupt influence, instead of enlightening the mind, and forming it to a love of wisdom and virtue. Hence the frequent complaint, among the sober and discerning, that modern female education is calculated to make superficial, assuming, and dissipated, rather than wise and useful women; and that they have just learning enough to detach them from the peculiar and proper duties of their sex, but not sufficient to expand, enrich, and regulate their minds. This complaint has, doubtless, some foundation *. But

* If the statement given in a former page, respecting the character and destination of the female sex, be just, then engaging in literary pursuits of such a *kind*, or to such a *degree*, as will render them either unfit or indisposed to act in their peculiar domestic sphere, is, in ordinary cases, unwise and mischievous. This remark applies with particular force to that kind of reading, which has a tendency to consume time, without conferring a single advantage of solid information, or of real wisdom. Those young ladies who, instead of studying theology, morals, gram-

instead of proving that a taste for literature is improper or injurious in females, it only serves to admonish us, that their studies should be more extensive and better directed; that an acquaintance with novels only will never make any woman a good housewife, mother, friend, or Christian; and that literature in them, as well as the other sex, though in itself an invaluable blessing, may be perverted into a heavy curse.

The elegant accomplishments of *music* and *drawing* were also more commonly made a part of female education, at the close of the eighteenth century, than at any former period with the history of which we are acquainted. We nov see every day, in the houses of those who belong to the middle class of society, instruments of music, and productions of the pencil, which a century ago were rarely seen in the houses of the most conspicuous and wealthy. This increase of attention to *music*, as a part of female education, during the last century, is more especially remarkable in Great Britain and America.

On the subject of *Education*, the century under review has given birth to a doctrine, which, though noticed in a former chapter, is yet too remarkable and too pregnant with mischief, to be suffered to pass without more particular consideration in the present. It is, that education has a kind of intellectual and moral *omnipotence;* that

mar, geography, history, chemistry, *&c.*, give all their reading-hours to *Novels*, would do well to ask themselves, how far this kind of employment is likely to qualify them to be dignified heads of families, respectable companions of their husbands, or useful members of society.

to its different forms are to be ascribed the chief, if not all, the differences observable in the genius, talents, and dispositions of men; and that by improving its principles and plan, human nature may, and finally will, reach a state of absolute perfection in this world, or at least go on to a state of unlimited improvement. In short, in the estimation of those who adopt this doctrine, man is the child of circumstances; and by meliorating these, without the aid of religion, his true and highest elevation is to be obtained: and they even go so far as to believe, that, by means of the advancement of light and knowledge, all vice, misery, and death, may finally be banished from the earth. This system, as was before observed, seems to have been first distinctly taught by M. Helvetius, a celebrated French author who wrote about the middle of the age we are considering, and was afterwards adopted and urged with great zeal by many of his countrymen, particularly Mirabaud and Condorcet; and also by Mr. Godwin, and others, of Great Britain.

This doctrine of the *omnipotence of education*, and the *perfectibility* of man, seems liable, among many others, to the following strong objections:—

First. It is *contrary to the nature and condition of man.* Though every succeeding generation may be said, with respect to literary and scientific acquisitions, to stand on the ground gained by their predecessors, and thus to be continually making progress; yet this is by no means the case with regard to intellectual discipline and moral qualities. Each successive individual, how-

ever elevated the genius, and however sublime the virtues of his ancestors, has to perform the task of restraining his own appetites, subduing his own passions, and guarding against the excesses to which his irregular propensities would prompt him. Suppose a Bacon, or a Newton, after all his intellectual and moral attainments, to have a son. Is this son more wise or more virtuous, on account of the genius and attainments of his parent? By no means. He has the same laborious process to undergo, for the acquisition of knowledge, and the same vigilance and patient self-denial to exercise, for the regulation of his moral character, as if his parent had been the most ignorant and degraded of beings. And this, from the nature and condition of man, must always continue to be the case. If every successive individual of our species must come into the world ignorant, feeble, and helpless; and if the same process for instilling knowledge into the mind, and restraining moral irregularities, must be undergone, *de novo*, in every instance, on what do these sanguine calculators rest their hopes that we shall attain a state of intellectual and moral perfection in the present world? They must suppose either that the propagation of the species, by the intercourse of the sexes, will cease; or that, contrary to every law, man will at length come into the world with all that maturity of reason, light, and information, which belongs to adult years. But it is presumed neither of these suppositions will be adopted by rational inquirers.

Secondly. Another objection to this doctrine is, that it is *contrary to all experience*. The world

has existed near six thousand years; and, during this long period, the exertions of intellect and of virtue have been numerous and great. It will even be readily granted, that, amidst the mortifying vicissitudes and the degrading retrocessions which the history of knowledge presents, mankind are now far more enlightened than at any former period. But is it a fact, that real wisdom, moral purity, and true happiness, have always kept pace with the improvements in literature and science? Are the most learned and scientific nations, and the most learned and scientific individuals, always the most virtuous? Are luxury, fraud, violence, unprincipled ambition, the vicious intercourse of the sexes, and the various kinds of intemperance, less frequent among the polished and enlightened nations of Europe, than among the untutored natives of America? It is presumed, that no reflecting mind will answer these questions in the affirmative. What, then, becomes of the fundamental principle of those who hold the doctrine in question; viz. That the progress of knowledge is alone sufficient to reform, exalt, and finally to render perfect, the human race? If this principle were well founded, we should find virtue and happiness, both in individuals and societies, bearing an exact proportion to the advances made in knowledge, which experience attests is far from being the case.

But it will perhaps be said, that the principle of *experience* may be pressed too far; that it is not legitimate reasoning to infer, because an event has never yet occurred, that therefore it never can or will take place. But if a certain

cause produce a given effect, there must be a *tendency* in that cause to produce this effect. Now, if this *tendency* be real, when the cause is exerted in a certain degree, the effect may generally, if not always, be looked for in a corresponding degree. But if it be not *generally* true, that the most enlightened are the most virtuous; if it be not *generally* true, that in proportion as men make progress in intellectual improvement, they make progress in moral excellence; we may with confidence conclude, that these two species of improvement do not necessarily stand in the relation of cause and effect to each other, and, therefore, that from the existence of the former, we cannot legitimately infer the existence of the latter.

Thirdly. A further objection to the doctrine of human *perfectibility* has been drawn, with great force, from the principle of *population*, compared with the *means of subsistence*. It has been asserted by acute and well informed writers, that the progress of *population*, when unrestrained, is always in a *geometrical ratio*, and that the increase of the means of subsistence is, under the most favourable circumstances, only in an *arithmetical ratio*. If this be the case, it is evident that the progress of population must continually, unless in extraordinary circumstances, be checked by the want of subsistence; that these two will ever be, from their very nature, contending forces, and will be found more or less, in the most advantageous states of society, to produce want, fraud, violence, irregularity in the sexual intercourse, disease, and various kinds of vice; and, as the natural consequence of these, especially in their combined

force, much misery and degradation to man. There seems to be no method of avoiding this conclusion, but by contending, that, when knowledge shall have made a certain degree of progress, both the intercourse of the sexes and the necessity of food and raiment will cease. But will any one seriously maintain that such events are probable? Do we actually see individuals or communities, as they advance in learning and refinement, discover less propensity to the sexual intercourse, or a greater disposition or ability to do without the means of bodily sustenance? It will not be pretended that either of these is the case. But as long as the propagation of the human species continues to stand on the footing and to depend on the principles which it now does; and as long as food and raiment are necessary as means of subsistence, human society must be doomed to exhibit more or less of ignorance, vice, and misery *.

Fourthly, It is evident that the doctrine of the unlimited efficacy of education, and the *perfectibility* of man, is wholly inconsistent with the *scripture account of the creation and present state of man.* The sacred volume teaches us that we are fallen and depraved beings; that this depravity is total, and admits of no remedy but by the grace declared in the Gospel; that the most virtuous will never be perfect or completely holy in the present world, and that misery and death are the

* See this argument placed in a strong and interesting point of light in a work entitled *An Essay on Population*, by Mr. MALTHUS, which, in force of reasoning, and in candour and urbanity of discussion, has rarely if ever been exceeded.

unavoidable lot of man while under the present dispensation. It is true, the same scriptures speak of a future period of *millennial* happiness and glory, when divine knowledge shall universally abound, and when peace and happiness shall fill the world. But the *Millennium* of the Bible differs essentially, both in its *cause* and *nature*, from the period which the advocates of this *philosophy*, falsely so called *, describe in such glowing colours, and expect with so much confidence. The believers in the former expect it to be produced by the prevalence of that divine illumination, and that evangelical holiness, which have already been found so transcendently efficacious in promoting the virtue and happiness of men, notwithstanding the obstacles which have stood in the way of their benign operation; while Helvetius, Condorcet, Godwin, and their disciples, expect every thing to be accomplished by the progress of knowledge, which has been so thoroughly tried, and proved so lamentably ineffectual. The Millennium of scripture is represented as a period of knowledge, benevolence, peace, purity, and universal holiness; but the millennium depicted in philosophic dreams is an absurd portrait of knowledge without real wisdom, of benevolence without piety, and of purity and happiness without genuine virtue.

It will be readily granted, indeed, to the advocates of this delusive system, that education is ex-

* It is to be regretted that the word *philosophy*, so noble and elevated in its original and only proper meaning, should be so often prostituted by an application to the reveries of pride, ignorance, and vanity.

tremely powerful; that much of the difference we observe in the talents and dispositions of men is to be ascribed to its efficacy; and that the lovers of knowledge may be expected hereafter to make such improvements in literature, such discoveries in science, and such useful reforms in the plans of instruction, as exceedingly to promote the general improvement of man. But before the doctrine of perfectibility can be adopted, the nature of man must be totally changed; his present habits and wants must cease; and he must become a being of an essentially different character from that which his Creator has given him. The husbandman, by skilful and patient culture, may highly improve the quality of many species of the vegetable tribes. He may cause that which, in a neglected spot, was small, feeble, and unpromising, to become, in more favourable circumstances, vigorous, luxuriant, and flourishing: in short, it is not easy to say how far, under enlightened and unwearied cultivation, he may carry the improvement of those objects to which he devotes his attention. But to suppose that there are no limits to this improvement; to suppose that under the wisest management a rose might be so expanded as to cover a field of many acres, or a stalk of wheat so enlarged as to vie with the oak of the forest, would surely be the height of extravagance and folly *.

The doctrine of *human perfectibility*, however, is too flattering to the pride of man not to have considerable currency among certain classes of

* See the *Essay on Population* before quoted.

society. Accordingly, the effects of this doctrine may be distinctly traced in many parts of the civilised world, from its influence in seminaries of learning, on the general interests of education, and on many social institutions. That this influence is unfavourable, will not be questioned for a moment by those who consider truth and utility as inseparably and eternally connected.

From the foregoing remarks it appears that education, in the course of the eighteenth century, underwent important revolutions. That so far as respects the extension of its benefits in a greater degree to the female sex, and to almost every rank in society; the multiplication of seminaries of learning, of popular elementary works for the use of youth, and of the various means and excitements to the acquisition of knowledge; and the decline of that despotic reign which the dead languages held for three preceding centuries, we may look back on the period under consideration as a period of honourable improvement: but that in some other respects, and particularly with respect to the patient, laborious, and thorough investigation of the various objects of knowledge; the depth of erudition; the discipline and subordination of academic establishments; and the general moral influence of literary and scientific acquirements; the last age cannot with propriety boast of much progress.

CHAPTER XXVI.

NATIONS LATELY BECOME LITERARY.

THE last century is not only distinguished by numerous discoveries, and by rich additions to the general stock of science, but also by the rise of several nations from obscurity in the republic of letters, to considerable literary and scientific eminence. To attempt to give a full view of the commencement and progress of a taste for literature in those nations would lead to a minuteness and extent of discussion altogether beyond the limits of our plan. The design of the present chapter, therefore, is only to state some general facts, and to connect with them such names and collateral events as may appear to demand notice, either for the purpose of throwing light on the principal object of inquiry, or of doing honour to meritorious individuals. In the list about to be given of new literary countries, it will not be possible, for various reasons, to include all that might with propriety be mentioned. Passing by several nations, therefore, of inferior character, the most important of those which in the last century have become literary are *Russia*, *Germany*, and the *United States of America*. To each of these some attention will be separately directed.

SECTION I.

RUSSIA.

At the beginning of the eighteenth century, *Russia* had scarcely a literary existence. Almost entirely without learned men, and destitute of the means of acquiring knowledge, the whole empire may be said, with little exception, to have been sunk in ignorance and barbarism. The language of the country was in a miserably confused and chaotic state, without rules, and with scarcely any fixed character; and of course no writers of taste in that language had appeared. It is true, the art of printing was introduced into Russia as early as the sixteenth century, and some feeble efforts were made, about the same time, to enlighten and civilise the people. Efforts still more vigorous and extensive, to effect the same purpose, were made in the seventeenth century; but they were soon relaxed, and little was done in this way until Peter the Great ascended the imperial throne.

The crown devolving on Peter, at the close of the seventeenth century, he early formed the design of introducing into his empire, as far as possible, the various arts of civilised life, and that attention to letters and science which he found to be so useful in other nations. For this purpose he travelled into foreign countries; made himself acquainted with their literary and scientific insti-

tutions; sent some of the most conspicuous young noblemen in his dominions into different parts of Europe, for the purpose of improving themselves in literature; and invited many foreigners of distinction to settle at his court. He established a printing office in Petersburg, for publishing books in the vulgar tongue; and among many other works caused a large edition of the Bible in that language to be printed and scattered through his dominions. He instituted also, beside schools of less celebrity, in different parts of the empire, a mathematical school, a seminary for instruction in navigation, a museum for the collection of curiosities from all parts of the world, and an observatory, for the promotion of astronomical science: in short, he endeavoured, as far as possible, to transplant from all other nations, into his own country, every thing that appeared to him ornamental or useful. By these means he produced a taste for letters and science among some of the higher classes of his subjects, and laid the foundation of that general improvement in his empire, which has since risen to such an honourable height *.

The establishment of the *Imperial Academy of Arts and Sciences* forms an important era in the history of Russian literature. This institution owes its origin to Peter the Great, who, during his travels, observing the advantages of public societies for the promotion of useful knowledge,

* For more minute information on the subject of Russian literature than it is convenient to give in the present sketch, see Coxe's *Travels*, and Tooke's *Survey of the Russian Empire*, his *History of Russia*, and his *Life of Catharine II.*

determined to form an association of this kind in his own country. For this purpose, when in Germany, he consulted Leibnitz and Wolf, and availed himself of their learning and experience in the formation of his plan. With their aid he at length completed the constitution of the *Academy*, and signed it on the tenth of February, 1724, but was prevented by his sudden death from putting it into effective operation. His decease, however, did not defeat the laudable and well formed design. The academy was established by Catharine I on the twenty first of December, 1725, and the first meeting took place two days afterwards. This empress not only favoured the institution, but also exercised great munificence towards it. She made a liberal grant of money for the support of fifteen members eminent for learning and talents, who were pensioned under the title of professors in the various branches of literature and science. And that nothing might be omitted which could promote her leading object, she invited a number of eminent foreigners to Petersburg, for the purpose of filling the professorial chairs, for which provision had been made. The most distinguished of these foreigners were Nicholas and Daniel Bernoulli, the two de Lisles, Bulfinger, Wolf, and Euler, whose profound erudition and scientific industry could not fail of promoting the interests of knowledge wherever they were placed.

Perhaps few institutions of this nature, in modern times, have been more diligent or more successful in pursuing the objects for which it was formed than this academy. Beside its published

transactions, which amount, it is believed, to nearly fifty volumes, and which are full of valuable information both in literature and science; its members have done much, both in their official and private capacities, to diffuse almost every branch of useful knowledge throughout the empire. Perhaps no country can boast of having produced, within the space of a few years, such a number of excellent publications on its internal state, its natural history, its topography, and geography; and on the manners, customs, and languages of different nations; as have issued from the press of the academy.

These exertions of Peter and Catharine were aided by some of their native subjects, who began to perceive the importance of literature, and to form plans for the diffusion of it among the people. It was in the reign of the former, that those improvements in the Russian or Sclavonian language commenced, which have since made such honourable progress. To Theophanes Prokopovitch *, archbishop of Novogorod, a man of learning and taste, and a native of Russia, much honour is due, for labouring to promote among his

* Theophanes Prokopovitch was born in Russia in 1681, and died archbishop of Novogorod in 1736. After receiving as good an education as his country afforded, he went to Rome, where he resided three years, and where his literary and scientific acquirements were greatly extended. He was profoundly learned, not only in Latin, Greek, and Hebrew literature, but also in philosophy and theology. He was the first Russian divine who published a regular systematic view of the doctrines of his church. His principal work is composed in Latin, under the title of *Christiana Orthodoxa Theologia*. His discourses are deemed classical performances.

countrymen a taste for polite literature. He not only cultivated and endeavoured to extend the influence of learning during his life, but likewise left a legacy to be applied to the same object after his decease.

In this laudable zeal for promoting the literary interests of his country, Theophanes was followed by Lomonozof, who, it was before observed, has been styled the great refiner of the Russian language *. His labours may be considered as forming an era in the literary progress of his country, and are always mentioned as having been eminently conducive to this progress.

During the short reign of Peter II, the academy, and the general interests of literature, being neglected by the court, greatly declined. The salaries of the professors were discontinued, and an almost universal disregard to science prevailed. When the empress Anne came to the throne, the court again patronised the cause of letters and science. She revived the academy; enlarged the

* Lomonozof was the son of a fishmonger at Kolmogori, in Russia. He was born in the year 1711, and died in 1764, in the 54th year of his age. He was fortunately taught to read, an accomplishment by no means common among persons of such humble origin in Russia. His genius for poetry was first kindled by the perusal of the *Song of Solomon*, done into verse by Polotsky, in a very rude and miserable manner. He fled from his father, who would have compelled him to a disagreeable marriage, and took refuge in a monastery at Moscow, where he had an abundant opportunity of indulging his taste for letters. He was afterwards taken under the patronage of the *Imperial Academy at Petersburg*, and proved one of the most distinguished literary characters of the age. His works were collected after his death, in three volumes octavo.

provision which had been made for its most active members; added a seminary for the instruction of youth, under the superintendence of the professors; and did much for the diffusion of liberal knowledge. Both the academy, and the seminary connected with it, flourished for some time under the direction of baron Korf; but upon his death, towards the latter end of Anne's reign, a person without erudition, wisdom, or enterprise, being appointed president, many of the most able and useful members quitted Russia in disgust. At the accession of the empress Elizabeth, new life and vigour were again restored to this institution; the original plan was still further enlarged and improved; some of the most learned foreigners were again drawn to Petersburg; and, what was considered a very promising omen for the literature of Russia, two natives of the country, Lomonozof, before mentioned, and Romofsky, another man of genius and learning, were enrolled among the members of the academy.

But when Catharine II came to the imperial throne, a new and illustrious era commenced. Her exertions for the encouragement of literature were more spirited and liberal than those of any of her predecessors, excepting Peter, and more extended and successful than even his. She fostered the academy with the utmost zeal; provided additional funds for its more ample support; prevailed on a number of learned foreigners to accept of professorships in the academy, and other places of honour and profit at her court; caused the geography and natural history of her empire to be carefully explored; and gave a new spring to

the growth of literature and science in every part of her dominions in which they had been planted. But there were two events in the reign of Catharine which deserve to be particularly recorded, and which must be supposed to have had a considerable influence in promoting the diffusion of knowledge among her subjects.

The first is, the order issued, in the year 1768, by the empress, for *translating a number of standard works*, in various languages, into the Russian, thereby at once improving the national tongue, and extending a knowledge of some of the best publications of taste and science throughout her empire. For defraying the expense of this undertaking she granted an annual sum, and engaged in the work some of her most learned subjects, by whose labours many of the Greek and Latin classics have been presented in a respectable Russian dress*; and a number of the most valuable works in the English, French, and German languages, given to the inhabitants of that country in their own dialect. A considerable portion of these translators were natives of Russia, but the greater number were learned foreigners.

The other event referred to is the establishment

* Among the numerous versions made in consequence of this imperial order, the following are worthy of particular notice. The works of *Plato*, translated by Siderofsky and Pakhomof; the works of *Hesiod* by Fryanfynofsky; *Homer's Iliad* by Yekimof; the *Æneis* and *Georgics* of *Virgil* by Yekimof, and also by Petrof; the *Metamorphoses* of *Ovid* by Kofitzky; and the *Odes* of *Horace* by Popofsky. To attempt an enumeration of the English, French, and German classical works which have been naturalised in Russia, would exceed the reasonable limits of a note.

of normal *Schools*, by Catharine, in every province in her empire. This establishment commenced about the year 1780, when places of instruction were formed, not only for the children of the nobility, but also for those of inferior rank. For this object the empress did not content herself with making ample pecuniary provision, but also caused elementary books, for the instruction of youth in religion and morals, as well as letters, to be composed or translated, and distributed throughout her dominions. It is scarcely necessary to add, that the influence of these institutions has been benign and extensive.

Beside the seminaries of learning already mentioned, the various sovereigns of Russia during the last age, and especially Catharine II, formed numerous societies for the promotion of *Arts*, *Manufactures*, and *Agriculture*; established *Libraries*, not only in Petersburg, but also in other parts of the empire; made large collections of specimens in the *Fine Arts*, and endeavoured, by other methods, to awaken the attention of an ignorant and barbarous people to the improvements of civilisation, and the importance of knowledge.

Perhaps it is not saying too much to pronounce, that, notwithstanding the detestable character of Catharine II, considered in a moral view, and notwithstanding the odious despotism which she exercised, no crowned head ever did more, in the same length of time, to raise the character and promote the general welfare of her subjects. And when it is considered how low she found the greater part of these subjects sunk in ignorance and brutality at her accession to the throne, it

is astonishing that her efforts were attended with so much success.

When this empress began her reign, little attention had been devoted to *Natural Philosophy*, or *Natural History*, in her dominions: but within a few years past, much has been done in these branches of science, by a number of persons, both natives and foreigners. Among the former, Lepechin, Guldenstædt, Ozeretzkofsky, Solokof, Suyef, Rumofsky, and Florinsky, deserve to be mentioned with particular respect. Among the latter, Pallas *, Gmelin, Falk, Æpinus, Georgi, Renovantz, and several others, hold an honourable rank. By the labours and writings of these philosophers, a considerable taste has been excited in Russia, for the inquiries to which they directed their attention.

* Peter Simon Pallas was born at Berlin in the year 1741, and is the son of a distinguished surgeon of that city. After enjoying every advantage to be derived from the universities of Halle and Göttingen, he travelled into other parts of Germany, spent some time in Holland and in England, and every where directed particular attention to natural history, beside improving himself in other branches of knowledge. He was, early in life, invited by Catharine II to Petersburg, where he was appointed professor of natural history in the Imperial Academy of Sciences, and where he has ever since maintained a growing reputation for talents and learning. Professor Pallas is probably the most accomplished naturalist now living. His *Elenchus Zoöphytorum*; his *Miscellanea Zoölogica*; his *Novæ Species Quadrupedum e Glirium ordine*; his *Enumeratio Plantarum quæ in Horto Procopii a Demidof Moscua vivent*; his *Neue Nordische Beytrage*; his *Icones Insectarum, &c.*; and his *Flora Rossica*, are too well known, and too highly esteemed among natural historians, to render an account of their respective merits necessary. This great man now resides in Crim Tartary, on an estate granted him by the empress, where, in the enjoyment of dignified leisure, he devotes himself to his favourite pursuits.

In *Mathematical Science*, Kotelnikof, Rumofsky, and Inokhodzof, have shown themselves accomplished in a very respectable degree, by their memoirs in the transactions of the academy. Beside these, Koselsky, Anitschkof, Golovin, and Siretuschkin, have published distinct works on various branches of the Mathematics, which, beside doing honour to their authors, have contributed to extend the knowledge of this science among their countrymen.

For contributions to the science of *Geography*, Russia is still more distinguished. The *Statistical Survey of the Russian Empire*, by Pleschtscheyef, is a very instructive and valuable work. In addition to this, the various publications of Suyef, Irodionof, Kotoftzof, and Hackman, are all conspicuous and useful.

A little more than thirty years ago, the science of *Medicine* was wholly uncultivated in Russia. It is said, that scarcely three books had been published on this subject in the whole empire, antecedently to the year 1770. Since that period, the progress of medical knowledge has been astonishingly great, and the number of medical publications remarkably increased. To professor Ambodick, his countrymen are indebted for valuable publications on anatomy, physiology, materia medica, and obstetrics, beside translations of some important works on different branches of the healing art. The medical works of Schumliansky, Tichorsky, Samoilovitch, and Terekhofsky, both original compositions and translations, are also mentioned with applause by the literary historians of that country. It is, moreover, proper to

take notice, that several foreigners of distinction have published, on various medical subjects, in the Russian language. The names of Bacherach, Vien, Pekin, Uhden, Mohrenheim, and Ellisen, belong to this list, and are represented as holding a respectable station in the public opinion at Petersburg.

In *Historical* composition, Russia has lately produced some specimens worthy of notice. The *History of Russia*, by Schtscherbatof, is said to hold the first place in the catalogue. Beside this, the various productions of Gollikof, Tumansky, Tschulkof, Bogdanovitch, and Vagonof, are generally mentioned among the respectable works of this class.

In *Poetry*, it was before observed, that Russia had given birth to works of considerable merit; and also that they were almost wholly the productions of the eighteenth century. The services rendered to this branch of literature by Lomonozof, Sumorokof, Kherashof, and Karamsin, were particularly mentioned in a former chapter. Beside these, Kniæshnin, Derschaven, Petrof, van Wisin, and Yelaghen, are enumerated, with great respect, among those Russian poets, who are either now living or lately deceased.

Even the *Fine Arts* have not been without some zealous and able cultivators in the empire under review. In *Painting*, Levitsky and Koslof, beside several foreigners, are much distinguished; the former in portrait, the latter in history: in *Sculpture*, Schubin, Maschalof, Ivanof, Gardeyef, and Khailof, are mentioned as respectable artists: and in *Engraving*, Skorodumof and Schlepper,

beside others, drawn from different countries, afford abundant evidence, that, even in the inhospitable climate of Russia, the elegant arts can live and flourish.

The study of *Languages* has been, for a number of years, more cultivated in Russia than could have been expected, considering the infant state of literature in that country. Beside all the attention paid to the cultivation of the vulgar tongue, which was before noticed, and the numerous instances of profound acquaintance with the best writers of Greece and Rome*, considerable labour has been bestowed, by a number of the literati of that empire, on the study of various living languages. The astonishing monument of learning and industry, in this branch of inquiry, given to the public by professor Pallas, was mentioned in a former chapter, as doing him great honour. The translator Yærig is supported by the academy, to study the Mongolian language among that people. Leontief, of the college of foreign affairs, has translated a great number of works from the Chinese language, and may be considered among the most accomplished scholars in Chinese literature now living in Europe. And there is no want of works in Russia,

* Among many persons who might be mentioned as having distinguished themselves by their attainments in classic literature, it would be improper not to take some notice of Plato, archbishop of Moscow, and Eugenius, a naturalised foreigner, archbishop of Slavensk and Kherson. The former has the character of a profound scholar; but the latter is perhaps still more celebrated for his translation of the *Eclogues* and *Georgics* of Virgil into Greek hexameters, which was a few years ago splendidly printed in folio, at the expense of prince Potemkin.

for learning a large portion of the modern European languages.

Literary Journals have never had much encouragement or circulation in Russia. Several attempts have been made to establish them, and they have obtained a slender support for a time; but the state of literature in that country is not sufficiently popular to render works of this kind generally sought after and read. *Newspapers* are also few in number, and comparatively confined in their dissemination. The nature of the government conspires with various other disadvantageous circumstances, to impose restraints on their circulation.

Petersburg possesses only *one* public library; but has several large private collections of books, and cabinets of natural history, &c.: the bookselling trade, however, has experienced an auspicious increase. The metropolis could boast in 1793 of about thirty booksellers; and towards the close of the last empress's reign, book-shops were first seen in the markets and fairs of provincial towns *.

During the last four years of the century under review, literature, it is believed, has received much less encouragement from the governing powers in Russia than for a considerable period before. And indeed, after all, it must be acknowledged, that the advantages of education have by no means had that general and equal diffusion in the empire which is to be wished, and might have been expected; and that a large portion of the inha-

* See Storch's *Picture of Petersburg.*

bitants are still sunk in a degree of ignorance and barbarism, which the exertions of another century, and of another succession of enterprising sovereigns, will perhaps not be more than sufficient to remove.

SECTION II.

GERMANY.

It can scarcely be said, with strict propriety, that Germany has lately become literary; for long before the period under consideration, there was much, both of literature and of science, in that empire. Those who have any acquaintance with the great contributors to human knowledge, whose names adorn the history of Europe, in the sixteenth and seventeenth centuries, need not be informed, that of this number Germany may claim a very respectable portion. But the cultivation of the German language; the publication of dignified and popular works in that language; and especially the commencement of a just taste in German literature, may all, with truth, be ascribed to the eighteenth century.

At the beginning of this period, all works of importance in Germany were written in the Latin tongue: and it seemed then to be a prevalent opinion among the literati of that country, that the compilation of huge folios, interspersed with innumerable quotations from writers in all known languages, was the most unequivocal proof of

literary merit. For this reason, the greater part of German productions, prior to the period under review, were proverbially tedious and dull, and were seldom sought after by the learned of other nations; insomuch, that it was often and seriously questioned, whether genius could grow in a German soil.

The first conspicuous writer who employed the German language in important scientific publications was Christopher Thomasius, the celebrated metaphysician and moral philosopher, who died in 1728. After him Wolf was the next who made use of the vulgar tongue, in treating of philosophical subjects. This example was soon followed by Mosheim, Schlegel, and others, of distinguished reputation in various species of composition *.

But though the employment of the German language in philosophical works began thus early in the last century, yet it must be confessed, that in the former part of it this language was extremely rude, harsh, and disgusting; exhibiting a motley mixture of Latin, French, and Italian words and idioms, incorporated without judgement or taste with the original Gothic stores †.

* For a knowledge of many of the facts and names contained in the following pages, the author acknowledges himself to be indebted to the *Historical Account, &c.*, before quoted, and ascribed to the rev. Mr. Will, now of New York.

† In the sixteenth century some specimens of German style were given to the public, much superior to any that appeared in the seventeenth. The works of Martin Luther, the great reformer, exhibit, we are told, a correctness, variety, and energy of diction, not to be met with in the works of any writer that preceded him, nor indeed of any that immediately followed him. Through the greater part of the seventeenth century this language

It is true, much was done about this time, by several learned men, for regulating the grammar of their vernacular tongue. K. Dunkelberg, who died in 1708, was the first conspicuous German who perceived and publicly insisted on the necessity of regularly instructing the youth of his country in their native language. After him, Schilter, Leibnitz, von Stade, Steinbach, Wachter, and Frisch, wrote largely on the German language, and contributed much to its regulation and refinement. Still, however, after all the labours of these philologists, persons of tolerable correctness of taste were much dissatisfied with the corrupt jargon which continued to be in vogue.

About the year 1740, J. C. Gottsched became animated with a laudable zeal for the improvement of his native language, and engaged with ardour in various undertakings for this purpose; and though his own style was far from being a model of that purity and elegance for which he contended, yet his labours were by no means without considerable effect. He wrote several works on the subject, which were extensively useful. He engaged in controversies relating to philological questions with Bodmer, Breitinger, and others, which also served to throw important light on the German language. And he directed the attention of his countrymen to the English and French classic writers, whose influence in promoting the same object was very sensible. In

was in a course of degeneracy; and at the commencement of the eighteenth was found in a condition which loudly demanded reform.

short, before the death of this indefatigable labourer, which happened in 1766, he had done much to discountenance the wretched models which were before implicitly followed, and to bring into view principles and examples more worthy of imitation.

While Gottsched was engaged in these useful exertions, the great object of his pursuit was aided by the writings of Popowitsch and Meiners, who both published extensive and important works on the German language, and contributed toward its improvement in a degree much to their honour. But to no individual now living is this language more indebted than to the celebrated J. C. Adelung, who was mentioned in a former chapter. His *Grammar* and *Dictionary* of the *High German language* * are famous throughout Europe, and have probably done more to explore the etymology, to correct the orthography, and to regulate the syntax of that language, than any writer who appeared before him. To the above named eminent cultivators of the German language we might add, Voightel, Fulda, Moritz, and many more, who have published works on the subject of various degrees of merit, and who are mentioned with honour among the useful philologists of that country.

* The language spoken in the middle and southern parts of Germany is called the *High German*, of which that dialect which prevails in Upper Saxony, especially in Leipsic, Dresden, &c., is reckoned the most pure and elegant. In Lower Saxony and Westphalia the country people speak a language called *Flat German*, or *Low Dutch*, but still differing greatly from the *Low Dutch* of the United Netherlands.

But beside the numerous and valuable improvements which the German language owes to the professed writers on the subject mentioned in the preceding paragraphs, much may be ascribed to the circulation and influence of those specimens of good writing in that language, with which the eighteenth century, and especially the latter half of it, abounded. In this list, the first in chronological order which deserve to be mentioned are the publications of Bodmer, Breitinger, Gellert, Rabener, Cramer, and a few others, who furnished examples of regular and polished style decidedly superior to any former models. The period in which these men wrote is represented as the first grand epocha in the progress of German prose. It was in this period that the French classic writers began to be better known in Germany, through the medium of translations, by means of which the German style was enriched with many new words, idioms, and graces.

The second epocha in the German style is represented to be that which was formed by the authors of the *Berlinschen Litteraturbriefen*, and especially by Lessing and Moses Mendelssohn. About this time the British classic writers began to be studied with much ardour in Germany; and many of them being translated, and considered as models by some of the most respectable authors of that country, gave rise to new and important improvements in their style. The beauties of Milton, Addison, Swift, and Pope, began not only to be relished, but also to be copied by the German literati; and were soon afterwards, in a considerable degree, transfused into their own

tongue. From this period we are told that German prose became more concise, copious, and energetic, as well as more lofty and bold in its port.

The third and last epocha in the progress of German style is that formed by the writings of a number of eminent men since the improvements of Lessing and his contemporaries. Among these, Klopstock, Zimmermann, Wieland, Unzer, Herder *, Garve, Engel, Lavater, and a number of others, hold a high place. These writers enriched the language in which they wrote with new words and phrases; taught new and improved modes of constructing periods; introduced ornaments of speech more simple, natural, and elegant, than those which had been commonly in use before; and infused a sprightliness and vigour into their pages which scarcely any preceding writers had attained. The German constitution has confined eloquence almost entirely to the *pulpit*. We must therefore look to the sermons of that country for some of the best specimens of style. Mosheim was the first who introduced any kind of refinement and elegance of composition into the sacred desk. He was followed by Spalding, who is said to have been the first pulpit orator in Germany, who, in a superior degree, united simplicity with elegance, energy, and pathos. Zollikofer stands in the same high rank, with the addition of a philosophical cast to the elegant and popular form of his dis-

* Of all the German writers it is generally supposed that Klopstock, Lessing, Wieland, and Herder, discover the most profound and intimate acquaintance with their native language.

courses. Beside these, the names of Sturm, Cramer, Sack, Less, Seiler, Reinhard, Wurz, Braun, and many others, are considerably distinguished in the annals of sacred eloquence.

From all these sources, the German language, within the last fifty years, has drawn improvements so rich and numerous, that it is said to be one of the most copious and energetic languages in Europe. It has gained astonishingly in convenient and sonorous compounds, in elegant idioms, and graceful inversions; insomuch, that the German writer, instead of being cramped in every step of his progress by a narrow, confused, and unsettled jargon, as was the case at the beginning of the eighteenth century, has now a language at command, rich, various, of most accommodating pliancy, abundantly adequate to all his wants, and capable of being modified to as great a degree of perspicuity, suavity, and harmony, as almost any modern tongue.

In consequence of these improvements in the German language, it has been adopted, within a few years past, in most of the courts of the empire, instead of the French, which was formerly the court language in almost every part of Germany. Nor is its currency confined to the German empire. It has lately become one of the fashionable languages of Europe, and the acquisition of it is now considered nearly as important a part of polite education, as the acquisition of the French or English.

While the German language was undergoing this radical and important reform, other objects of a literary and scientific nature engaged the

attention of the learned men of that country, and were pursued with a degree of diligence and success which does them and the age which gave them birth the highest honour. A few facts and names only, out of the multitude which occur, can be mentioned in this place.

Natural or *Mechanical Philosophy* was cultivated by a few distinguished Germans in the seventeenth century; but in the eighteenth the number of this class of philosophers astonishingly increased in every part of the empire. The names of Leibnitz, Wolf, Kastner, Lambert, Mayer, von Zach, Herschel, Boze, Winckler, Ludolf, Richter, Woltman, von Humboldt, Schroeter, and Burckhardt, are only a small portion of those whose fame has filled the scientific world, as the authors of important discoveries and improvements in philosophy.

In *Natural History* the Germans made wonderful progress in the course of the last age. The amount of what they accomplished in this branch of science during the seventeenth century was comparatively small. Soon after the commencement of the eighteenth century better prospects opened, and since that time have been very honourably realised. No naturalist needs to be reminded of the invaluable service rendered to *Zoölogy* by madame Merian, Rosel, Klein, Ludwig, Frisch, Zimmermann, Blumenbach, Soemmering, Bloch, Muller, Leske, and Forster. Additions, not less important, or less known, have been made, within the same time, to *Botanical* science, by Knaut, Gærtner, Hedwig, Schreber, Jacquin, Breidel, Gmelin, Wildenow, Sprengel,

and many others. While *Mineralogy* has received immense improvements from the hands of Henkel, Woltersdorf, Vogel, Cartheuser, Voigt, Gellert, Raspe, Pott, Margraaff, and Werner.

At the commencement of the period under consideration still less had been done in *Chemistry*, by the German philosophers, than in either of the preceding departments of science. How great an amount of discovery and of useful experiment they have presented to the public since that time, it is unnecessary to state. The labours of Stahl, Juncker, Pott, Margraaf, Neumann, Klaproth, Crell, Meyer, Ingenhousz, Jacquin, and von Humboldt, are known and esteemed wherever chemical science is studied. Of distinguished writers on *Medicine*, Germany has been, though not equally, yet very honourably prolific during the period under review. The claims of Stahl, Hoffmann, van Swieten, Heister, Storck, Vogel, and Murray, to high honours, are generally acknowledged. And beside these, de Haen, Meckel, Weitbrecht, Sagar, Hufeland, Reil, Roschlaub, Reich, and many others, have contributed to raise the medical character of their country.

But it is chiefly with respect to progress in *literature*, strictly so called, that the eighteenth century gave rise to such remarkable improvements in Germany. In the *Belles Lettres*, and in works of *taste* generally, that extensive empire furnished nothing worthy of notice anterior to the age under consideration. But within this period no other part of the literary world has been, on the whole, so abundantly productive of works of this nature.

It was observed in a former chapter, that no *Historical* work, deserving of commendation for its taste or elegance, had appeared in Germany prior to the period under review. Within the latter half of this period, the works of Haberlin, Gebauer, Schmidt, Muller, Heinrich, Beck, Meusel, Gatterer, Galletti, Ebeling, and Schiller, afford very honourable monuments of German talents. Of these the manner of Schiller appears to be considered as the most easy, spirited, and elegant. But though the historians of that country have made great progress, within a few years past, in cultivating this species of composition, it is conceived that none of them have yet reached the high rank of historical excellence for which Robertson, Hume, and Gibbon, are so generally celebrated.

The Germans exceed all the rest of the world in the number and excellence of their *Statistical* histories. The first work published under this denomination, and in a scientific form, was about the middle of the century, by professor Achenwall, of Göttingen, who is considered as the father of *Statistics*. Since that time many others have published works of a similar nature, but of superior excellence. Among these Walch, Reinhard, Bauman, Toze, Remer, Meusel, and Sprengel, are entitled to particular notice.

But there is no species of composition with respect to which a greater improvement has been made in Germany, during the last age, than in that of *Fictitious History*. The only *Romances* or *Novels* which had appeared in that country, at the beginning of the century, were wretched

imitations, which attract attention at present only as monuments of bad taste. About the year 1746, Gellert made the first attempt to introduce a different and more correct model of fictitious history. The appearance of his *Schwedische Gräfin*, published in that year, forms a new era in this department of German literature. The novels published in Germany, from 1746 to 1754, were, for the most part, translations from the English and French languages. In 1754 Gesner's pastoral romance, entitled *Daphnis*, appeared; excited much attention, and formed a second epocha in the progress of this kind of composition. A few years afterward the *Teutschen Grandison* of Musæus, and the *Agathon* of Wieland, gave another and a still more correct turn to the German taste in novel writing. Beside these, the various works of Goethe, Schiller, Nicholai, Klinger, Herder, Richter, and many others, deserve to be enumerated among the most celebrated fictions of that country*. In no part of Europe, it may be safely affirmed, are so many novels continually produced as in Germany. Several hundreds annually issue from the press, and are circulated with growing zeal in every part of the empire. It must be granted, however, that some of the most popular German novels are highly mischievous in their moral tendency; and that no small number of their mercenary writers are constantly engaged in diffusing, through the medium of fictitious his-

* The author is too little acquainted with the works of these and other German novelists, to say any thing about their comparative moral tendency. He only means to speak of them as celebrated in a literary view.

tory, the most corrupt and poisonous principles, both in religion and morals.

No less remarkable has been the progress of the German literati in *Poetry*, within the last fifty years. The history of literature in that country presents us with no specimens of poetry to which any high degree of excellence can be ascribed, before those of Hagedorn and Haller, who were both born in 1708, and who are justly considered as the founders of the modern poetical school in Germany. Between 1740 and 1750, an association was formed by a set of young poets, possessed of eminent talents; many of whose compositions were published in the *Belustigungen des Verstandes und Witzes*, and in the *Neuen Beyträgen zum Vergnügen des Verstandes und Witzes*. The most eminent members of this society were Cramer, Gellert, Gleim, Klopstock and Rabner. Among these, the works of Gellert and Klopstock had the most extensive and the most happy influence on the poetic taste of their countrymen. The *Messiah* of the latter * introduced a great and very useful reform both in the diction and versification of German poetry. So that the period of their association may be considered as forming a grand epocha in the history of this department of German literature.

Beside the poets already mentioned, a number of others have been long celebrated throughout Europe. Among these are Gesner and Wieland, distinguished in *epic* poetry; Kastner, Uz, and

* Klopstock published the first *Canto* of his *Messiah* in 1748; but it was not completed till the year 1773.

Dusch, in *didactic* poetry; Kleist, Voss, and Goethe, in *descriptive* poetry; Schlegel, Herder, Weisse, and Ramler, in *lyric;* and Canitz and Stolberg, in *satirical* poetry: Gesner and Voss, in *pastoral;* and Lichtwehr, Lessing, and others, in *fable.* Nor have the *dramatic* poets of Germany, in the last age, been inferior in genius and taste to those of any other country. Cruger, Schrœder, Iffland, Grossman, Lessing, Engel, Goethe, and Kotzebue, in *comedy;* and Weisse, Lessing, Leisewitz, Klopstock, Schiller, Goethe, Babo, and others, in *tragedy,* are well known to have raised the German drama to a very high degree of reputation, if not for moral purity, at least for spirit, force, and natural delineation of characters.

Germany has also abounded within the last twenty years, beyond any country on earth, in miscellaneous publications on philology, criticism, education, and every branch of polite literature. It ought further to be mentioned, to the honour of Germany, that although *classic* literature has much declined in that country, especially since the practice of delivering lectures in Latin, and speaking that language, in many of her seminaries of learning, has been discontinued; yet this kind of knowledge has declined probably less in Germany than in any other part of the literary world; and the literati of that empire may be considered as, on the whole, the best classic scholars that now adorn the republic of letters. The names of Kuster, Reiske, Ernesti, Heyne, Ruhnken, Matthæi, Schneider, Voss, Heeren, F. A. Wolf, Bottiger, and Heusinger,

with a much greater number of nearly equal eminence, would do the highest honour to any country, or any age.

Oriental literature eminently flourished in Germany during the eighteenth century. It may be questioned whether the oriental learning and critical skill of the Michaelises, Eichhorn, and Reiske, were ever before equalled. To which illustrious names it would be improper not to add those of Reineccius, Ludolf, Hezel, Schrœder, Wahl, Hirt, Tychsen, Paulus, and Hasse, who have rendered important services to the cause of eastern learning, and biblical criticism.

No country has ever produced so great a number of authors, within a similar period, as Germany, in the eighteenth century; and there is no country where a taste for reading more generally prevails, especially in the protestant provinces. Printing is carried to an excess truly wonderful. Almost every man of letters is an author. Books are multiplied to an incredible extent. Between *six and seven thousand* new works are annually published, beside smaller controversial pieces; for no one can become a graduate in their universities unless he has published at least one controversial treatise.

In Germany the authors by profession amount to about fifteen thousand? It is true, the greater part of these are chiefly occupied in translating from other languages, especially the French and English. But their translations are generally accompanied with large bodies of learned notes, which, if well executed, require all the judgement and labour of original composition. It is further

to be observed, that, of their prodigious number of books, *Novels* make a considerable part. But they also make a large annual emission of important works on the most interesting subjects in literature and science.

The book-trade of England and France is almost entirely confined to their capitals, while the other great towns have few booksellers; and even the greater part of these only act as factors or agents to those who reside in the grand centre of business. But the German empire has no capital city, which, like London or Paris, forms a kind of literary vortex, that absorbs the whole produce of the country, and out of which few books are to be found. For this reason literature is more generally diffused in Germany. The residence of many a petty prince is more fertile in literary productions, than some large cities in England or France. Hence the book-trade is more equally distributed through the country; and small towns, otherwise of little importance, are furnished with respectable and independent booksellers, each of whom, perhaps, will carry to the *Leipsic* and *Frankfort fairs* a dozen new works published by him, to be distributed not only in his own immediate neighbourhood, but also in every province of the empire.

The mode of disposing of books by resorting to *Fairs* for the purpose is peculiar to Germany, and has been established in that country for many years. To these great literary marts the booksellers flock in crowds from every part of the country, with bales of books, and with complete catalogues of the works which they have to sell.

Here an amount of sales, and especially of barter, is effected, which has no parallel in the world. This plan is attended with many advantages. Booksellers, by having so extensive and ready a sale, are enabled to strike off much larger impressions of good works, and to afford them at a lower price. He who wishes to procure a book in that country, instead of being condemned to a long and tedious search for what is only sold by one bookseller, has every publication of value brought to his door with the greatest certainty and expedition. And the frequent return of these extensive scenes of sale and exchange, has a tendency to keep up the public attention to literary objects, and to give a degree of life and interest to the commerce in books, which we look for in vain in other countries.

The zeal and enterprise of German booksellers are incredible. They frequently have agents and correspondents in every literary part of Europe, who send them, with the utmost speed, all useful intelligence, and procure for them the proof-sheets of new and important works as they are printing: whence it often happens, that the originals and the German translations are offered for sale at the same time. To this it may be added, that the ready and extensive sales of books which the fairs enable them to effect, give such manifest advantages, that they can more easily afford, and are more cheerfully disposed to pay, a liberal price for literary services, than the same class of men in most other countries. It is said that between three and four hundred booksellers

regularly attend the literary fairs, and that their number is rapidly increasing.

In Great Britain and Ireland there are *seven* universities. In Germany there are *thirty-nine* *; each of which may be considered as a grand focus from which the rays of light are thrown over the whole adjacent country, thus illuminating the empire, and bringing the means of knowledge to almost every door.

Within a few years a taste for the acquisition of living languages has remarkably prevailed in Germany. Perhaps the inhabitants of no country are so much disposed as those of the German empire to learn the languages of other nations. Beside the English and French, which have a very general currency (being read and spoken by a very large portion of their literary men), the Italian, Spanish, and Swedish are taught in many of their seminaries of learning. The great increase of this taste is one of the circumstances which preeminently distinguish German literature in the eighteenth century.

The interests of letters and science have seldom received very extensive or permanent aid from government in Germany. The constitution of the empire prevents any material aid of this kind from being rendered, especially on a large scale. A few of the subordinate princes have distinguished themselves by their efforts for the advancement

* Six of these universities were founded during the eighteenth century; viz. those of *Göttingen, Erlangen, Fulda, Bonn, Butzow, and Stutgard.*

of knowledge; and though Frederic II of Prussia was no friend to the German language *, yet his accession to the throne may be considered as a favourable era to German literature; because, by collecting so many foreigners, and especially Frenchmen, at his court, he excited a spirit of emulation among his native subjects; introduced much of the literature and science of other countries into his dominions; and thus indirectly promoted the general interests of knowledge in Germany.

Public Libraries were greatly enlarged and multiplied in Germany in the course of the eighteenth century. To this circumstance, and also to the great multiplication of literary and scientific *Societies*, may be ascribed no small share of that astonishing progress in literature and science by which every part of the country, and especially the northern provinces, have for some time been and are every day becoming more distinguished.

In short, during the eighteenth century Germany has risen from pedantry and dulness to a high character for genius and refined accomplishments in the literary world. Instead of presenting few and comparatively uninteresting publications, as was the case a hundred years ago, she has become by far the most prolific nation on

* Frederic II, among his numerous freaks and errours, was a great enemy to the German language. He ordered the *Transactions* of the *Royal Society of Berlin* to be published in French; by which, as many supposed, he meant to cast undeserved reproach on his native tongue, and to discourage the study and cultivation of it, though it had then become so fashionable.

earth in every species of literary production. She gives birth annually to *double* the number of publications that appear in France, and to nearly *treble* the number that are issued in Great Britain and Ireland *. Instead of being despised as she was at the beginning of the century for furnishing scarcely any other than *hewers of wood* and *drawers of water* to the republic of letters, she has produced, within the last fifty years, historians, poets, and dramatists, whose writings evince, that judgement, acuteness, imagination, elegant taste, and every qualification for fine writing, abound among her people. In fact, she has in several respects pushed her literary progress to a degree hitherto attained by no other nation, and affords a striking example of the influence of literature on national character.

But, while the progress of Germany in liberal knowledge, the industry of her authors, the enterprise of her booksellers, and the growth of taste

* The whole population of Germany is not supposed to exceed *thirty millions*. In the Austrian dominions the class of peasants are mostly serfs, or predial slaves, of which it is probable few are able to read. In the other provinces, especially Suabia, Westphalia, and the Upper Rhine, the number must be very great of those who, if they have been taught to read at all, never devote any part of their attention to books. Not more than *ten millions* of the thirty are of the reading age; and it is a very liberal calculation to suppose, that, of these ten millions, not more than *one tenth* are in the habit of purchasing and perusing books. Hence, allowing the number of authors by profession to be *fifteen thousand*, which is said by some to be much below the real number, it appears, that, for every *sixty-six readers*, there is *one* who lives by the trade of authorship.—See New York *Month. Mag.* vol. ii, p. 9.

among her literati, deserve much praise, it may be questioned whether the friend of sound and useful learning can contemplate her literary aspect with unmingled pleasure. Is it not to be feared that the business of book-making is carried in that country to excess? Is it useful to fill a country with a countless number of hastily composed, and of course superficial books, on the most common subjects; thus perplexing and overwhelming the student, and imposing an unnecessary tax on the friends of literature? Above all, are not the moral and theological principles contained in too many of these works, and the practical tendency of a still larger number, such as must fill the virtuous mind with apprehension? There is such a thing as an injurious multiplication of books, even when they are all individually harmless; but where a considerable portion of them bear a corrupt character, every increase of their number will give the friend of human happiness a mixture of pain. There is no country now on earth (unless, perhaps, we must except France) in which literary enterprise is made the medium for conveying so much moral and theological poison as in Germany *.

* See Additional Notes *(L)*.

SECTION III.

UNITED STATES OF AMERICA.

The annals of American literature are short and simple. The history of poverty is usually neither very various, nor very interesting. Those who are accustomed to contemplate only the ancient and extensive literary establishments of Europe, and who measure every object by European standards, must look upon all that the Western hemisphere has hitherto presented, especially until within a few years past, as trivial and unworthy of regard. But those who recollect the origin and progress of the settlements which now form the United States, and who make an impartial estimate of what may be justly expected from a people situate as their inhabitants have been and are, will entertain a more respectful opinion of the small portion of literature which the country contains *.

* The author regrets that his account of the rise and progress of American literature is so much less full and satisfactory than he once hoped to make it. With all his partiality for his native country, he is convinced that its literary history, even if completely drawn out, would not make a very honourable figure. But of the few learned men and literary events of which we have to boast, it is mortifying that we know so little. The very names of some who, a century ago, were the most conspicuous benefactors to the interests of liberal knowledge in our country, are now almost forgotten; and with respect to the details of their acquirements and services, nothing can be learned. An attempt

The original settlers of the American States may be divided into three classes, viz. 1. Emigrants from England, who fled from persecution, and came to enjoy liberty of conscience: of this class were the first settlers in New England. 2. Emigrants from the same country, who were prompted chiefly by the hope of temporal emolument: of this description were the first settlers in Virginia and the Carolinas. 3. Emigrants from Sweden and Holland, who planted themselves in New York, and certain parts of New Jersey and Pennsylvania. The English colony established some years afterward in Pennsylvania by the illustrious William Penn, as well as that in Maryland by lord Baltimore, may be considered as bearing the mixed character of settlements prompted both by religious and worldly motives.

It might have been expected that the colonists of New England would be most early and zealous in their attention to literature. Their character, both for learning and piety, and the circumstances attending their establishment, were sufficient pledges of their disposition to promote the interests of knowledge, which they well knew to be one of the most important pillars of the church as well as of the state. Accordingly, during the greater part of the seventeenth century,

is made in the following pages, to collect a few of the names and facts which appeared worthy of notice. There is no doubt that many more will occur to different readers equally worthy of being mentioned. The author can only say, that he has endeavoured, as impartially as he was able, to exhibit the small portion of information which came within his reach.

the literature of the American colonies was in a great measure confined to New England. There the first *college* in America was instituted*; there the first *printing press* was established†; and those who are acquainted with the characters of Hooker, Davenport, Stone, Warham‡, Cotton, Dunster, Chauncey, Eliot, the Mathers, and other distinguished clergymen; and of Winthrop, Haynes, Eaton, Hopkins, Wyllys, and Wolcot, eminent civilians of Massachusetts and Connecticut, need not be informed that the number of learned men at that period in New England was by no means small.

The kind of learning most in vogue among such of the clergy and laity of that country as devoted themselves to study, during the seventeenth century, was precisely that kind which was most

* *Harvard college* was instituted in 1638, a few years after the first settlement of the colony. In the *Additional Notes* to this volume, the reader will find as particular an account of *all* the colleges in the United States, as the author could collect. He therefore forbears to enter into further details in this place.

† The first printing press established in North America was by Mr. Samuel Green, at Cambridge, in Massachusetts, in the year 1638. The first work printed was the *Freeman's Oath;* the next an *Almanac,* made for New England, by Mr. Pierce, a mariner; and then the *Psalms of David,* newly turned into *metre, &c.* There was printing work done in South America earlier than this. Professor Barton, of Philadelphia, whose zeal and talents in exploring American antiquities do him the highest honour, lately showed the author a vocabulary of one of the principal Indian languages of South America, printed in Mexico, not long after the middle of the sixteenth century.

‡ The rev. John Warham, who died at Windsor, in Connecticut, in 1670, is said to have been the first minister in New England who used *notes* in preaching.

fashionable in their native country when they left it *. Accordingly they were generally well, and some of them profoundly, read in the Latin, Greek, and Hebrew languages; in theology, ancient history, metaphysics, and some parts of mathematical and astronomical science. There is good reason to believe that the clergy and other scholars of New England, for near a hundred years after their first settlement, that is, till after the commencement of the eighteenth century, were more eminent for classical and theological erudition than men of the same profession at this day †. They were, in particular, much better acquainted with the Latin and Greek writers than their descendants can now boast of being; and many of them were masters of the Hebrew language, which at present is almost entirely neglected ‡.

* The university of Cambridge, in Massachusetts, was formed, as far as circumstances would admit, on the same plan with the universities in England; and the same course of learning was, in substance, pursued. The study of biblical literature and theological science was encouraged by the peculiar spirit of the times, and of the emigrants. And the direction once given was continued by the force of example and habit long afterwards.

† This appears not only from the *Magnalia Americana* of the celebrated Cotton Mather, but also from the few publications made by the clergy and others of that day; from an inspection of the books found in their libraries, and from the quality of early donations in books made to Harvard and Yale colleges.

‡ Many of the distinguished divines of Massachusetts and Connecticut, in the seventeenth and beginning of the eighteenth centuries, were celebrated for their knowledge of the Hebrew language. It is said that the rev. John Davenport, the second clergyman of that name, and who died minister of the church at

Beside the establishment of a college in Massachusetts, the inhabitants of that colony directed early and particular attention to the erection of subordinate schools in every part of the country. In 1641 the following law was enacted: "If any do not teach their children and apprentices so much learning as may enable them to read perfectly the English language, to forfeit twenty shillings; and the selectmen of every town are required to know the state of the families, &c." Not long afterward a law was made, that when any town increased to the number of one hundred families, they should set up a grammar school, the master thereof being able to instruct youth so far as that they may be fitted for the university, under certain penalties. To these schools, after a few years, academies were added; thus forming a system of general education, which has been from time to time improved, and which in the eighteenth century became one of the distinguished honours of New England.

It was not till towards the close of the seventeenth century that a seminary of respectable character, for general instruction in literature and science, was established in Virginia. The original settlers in that colony were, in several respects, of a very different description from their countrymen who settled in New England. But a small portion of them could boast of any considerable acquirements or taste in literature. Actuated chiefly by the love of gain in coming to a

Stamford, in Connecticut, about the year 1731, carried into his pulpit a Hebrew Bible only, and made use of no other.

rude and uncultivated country, they directed their principal attention to this object, and neglected most other concerns. Besides, not being so much under the influence of religious principles as their eastern brethren*, nor feeling in so high a degree the necessity of literary institutions for the promotion of ecclesiastical as well as civil prosperity, they might naturally have been expected to be more indifferent about their establishment. And to crown all, being formed of members who, though chiefly from one country, were less equal in station, less homogeneous in character, and less united by common sufferings, it was not to be supposed that they would act with the same harmony and zeal, in any pursuit which had public good for its object.

Hence, during a great part of the seventeenth century, the southern colonists paid but little attention to literary institutions. Such as wished to give their sons a liberal education, and could afford the expense, sent them to Europe for this purpose, and generally to some of the universities of Great Britain. This practice, indeed, was continued by many for a long time afterward; and accordingly it happened, that, until near the middle of the eighteenth century, by far the greater proportion of the young men of the Southern States who were liberally educated, had received

* The author does not mean to intimate that the first settlers in Virginia were destitute of religion; but merely (what he takes for granted every one will readily admit), that religion seems to have been a less prominent object, and to have entered less into their motives and plans in forming the settlement, than in New England.

their education at European seminaries. Those who could not afford to adopt this plan were obliged to content themselves either with such private tuition as they could command, or with the miserable system of instruction pursued in the few small and ill conducted schools which had been formed.

Such was the low state of literature in Virginia when the rev. James Blair, who went to that colony as a missionary about the year 1685, observing the great want of seminaries for the religious and moral, as well as literary instruction of youth; and perceiving among other evils the obstacles which this presented to the success of his missionary labours, formed the design of erecting and endowing a college at Williamsburgh. For this purpose he not only solicited benefactions from the colonists, but also made a voyage to England in 1693, to obtain the patronage of the government, and a charter for the proposed institution *. King William and queen Mary being then on the throne, the application of Mr. Blair was favourably received; a patent was immediately made out for erecting and endowing a seminary, under the name of "William and Mary college," agreeably to his request †, and the plan

* The laudable exertions of Mr. Blair are mentioned with great respect by bishop Burnet, in his *History of his Own Times*. See vol. iv, p. 174.

† The object declared in the charter was, "to found and establish a certain place of universal study, or perpetual college, for divinity, philosophy, languages, and other good arts and sciences." But neither theology nor the Hebrew language appear to have been so much studied here as at Cambridge in Massachusetts.

was soon carried into execution. He was named in the charter as the first president, and acted in that capacity till the year 1742*.

This college, though liberally endowed, has not flourished so much as its friends could wish. For more than seventy years after its establishment, it had rarely more than twenty students at any one time. The habit of sending young men to Europe for their education had continued so long, that many of the more wealthy persisted in it after they had a college erected among themselves. Within a few years past the number of students has considerably increased, and the prospects of the institution are becoming much more favourable.

* The rev. James Blair was born and educated in Scotland, where he obtained a benefice in the episcopal church. On account of the unsettled state of religion which then existed in that kingdom, he quitted his preferments, and went into England, near the end of the reign of Charles II. The bishop of London, considering him as well qualified for the office, both as to talents and piety, prevailed on him to go to Virginia as a missionary, where he was highly popular and eminently useful; and in 1689 obtained the appointment of ecclesiastical commissary for the province. Though the charter was given for "William and Mary college," about the year 1693, and though he was named therein as the first president, yet he does not appear to have entered on the duties of this office till the year 1729, from which period, until 1742, he discharged them with faithfulness. Mr. Blair was a learned and exemplary man, respected and useful in his various stations, and died at a good old age in 1743. He published four octavo volumes of discourses, under the following title: Our Saviour's Divine Sermon on the Mount explained; and recommended in divers Sermons and Discourses. London, 1742. This work is spoken of with high approbation by Dr. Doddridge, in his *Family Expositor*.

Neither in New York, New Jersey, Pennsylvania, Delaware, nor Maryland, had any thing taken place, in favour of literature, worthy of notice, prior to the eighteenth century. The inhabitants of these colonies, struggling with the difficulties of new settlements, not always in a state of perfect harmony among themselves, and of course too frequently encumbered with other engagements, did little to advance the interests of knowledge. A few schools were established, but they were on a small scale, were but indifferently conducted, and attracted but few pupils. The more wealthy class in these middle colonies, like their southern brethren, were at this time in the habit of sending their sons to Europe for their education; a practice which, though it caused a small portion of the youth in the middle and southern states to be more thoroughly educated than was common in New England, yet rendered education a much more rare attainment among the former than the latter, and, on the whole, exceedingly checked the progress of literature in the colonies.

It is to be observed, also, that the advancement of literature in the American colonies, during the seventeenth century, was not only retarded by the general poverty of the colonists, and by the numerous difficulties with which they had to struggle while surrounded by tribes of savages, and an uncultivated desert; but also by the erroneous opinions at that time prevailing concerning the *liberty of the press.* The business of printing was laid under very inconvenient and discouraging

restrictions, during a part of this period, in Massachusetts*. In the province of New York, for a considerable time, the introduction of a press was entirely prohibited. And it is believed similar restraints took place in some of the other colonies. The influence of such restrictions on the general progress of liberal information could not be otherwise than highly unfavourable.

At the commencement of the eighteenth century, an important seminary of learning rose in Connecticut. A number of the clergy, anxious more particularly that means might be adopted for supplying the churches with a succession of learned and able ministers, conceived the design of erecting a college. This was accordingly soon attempted, and with the most happy success. An act of incorporation was obtained from the general assembly in the year 1701, and the first commencement took place in Saybrook in 1702†.

* In 1662, twenty-four years after a printing press had been established at Cambridge, the general court of Massachusetts appointed two persons as supervisors of the press, and prohibited the publishing any books or papers until after they had been examined and approved by them. In 1668 the supervisors having allowed the celebrated work of Thomas a Kempis, *De Imitatione Christi*, to be printed, the court interposed, alleging that it "had been written by a popish minister, and contained some things less safe to be diffused among the people."

† Most of those who graduated on this occasion in Yale college had previously taken their master's degree at Cambridge, in Massachusetts. This accounts for a commencement taking place so soon after the erection of the college, and before students could have been carried regularly through an academic course. It must be acknowledged, however, that the American colleges early began to discover that fondness for dealing out

The course of instruction adopted in this college was, in general, directed towards those objects which were before mentioned as being most in vogue in New England. Its establishment is an important era in the literary history of Connecticut. From this institution, as well as from the sister college in Cambridge, many sons have been sent, who have done honour to their *alma mater*, and proved benefactors to the cause of liberal knowledge.

In 1714, the foundation of a library was laid in this college. Jeremiah Dummer, esq., of Boston, then an agent in London, presented to it more than eight hundred volumes of very valuable books, part of which were purchased by himself, and the rest obtained from his friends in London. Among the donors, on this occasion, appear the names of some of the most conspicuous literary and philosophical characters then living in Great Britain *. These books, together with large additions soon afterward made by governor Yale †

their honours with a liberal hand, which has since so much increased, not only in the United States, but also throughout the literary world.

* In the number of the contributors to this collection of books for Yale college, we find sir Isaac Newton, sir Richard Blackmore, sir Richard Steele, Dr. Burnet, Dr. Woodward, Dr. Halley, Dr. Bentley, Dr. Kennet, Dr. Calamy, Dr. Edwards, the rev. Mr. Henry, and Mr. Whiston, who severally presented copies of their own works. See the *Account of Yale College* in the Appendix to the rev. Mr. Holme's *Life of President Stiles*.

† Thomas Yale, esq., who had been governor of Fort St. George, in India: for his repeated acts of generosity to the college the trustees gave it his name.

and others, produced immediate and visible effects on the state of learning in the colony. Before their arrival there were scarcely any books in use, but such as had been imported with the first settlers; and of course little was known concerning the most important publications, discoveries, and improvements, which had been laid before the public in the course of the preceding century. From these books, the instructors and students of Yale college first learned the philosophy of Locke and of Newton, as well as the important improvements which had recently taken place in various departments of literature.

It was some years after the establishment of Yale college before the interests of literature began to assume a promising aspect in Pennsylvania. William Penn, being himself a learned man, was a friend to the progress of knowledge. We therefore find, that, under his auspices, there was established, as early as 1689, a respectable seminary for the instruction of youth, not only in reading and writing, but also in the learned languages, and in the sciences. This seminary was more particularly in the hands of the *Friends*, and was no doubt useful in forming many good scholars, and in producing a considerable degree of taste for the acquisition of knowledge. The celebrated George Keith * was the first teacher

* George Keith was a native of Aberdeen, in Scotland. In early life he belonged to the episcopal church; but afterward left that communion, and became a celebrated preacher among the friends. In 1692, having manifested a troublesome and disorderly disposition, he was disowned by them, and in a short

in this academy. He continued in the office, however, but one year; and was succeeded by Thomas Makin, who has been followed by a number of good instructors to the present time. But the circumstance of this institution being in a great measure confined to one denomination of Christians, rendered it less useful than it might have been on a more extensive and liberal foundation. Among those who were most active in promoting the interests of literature from 1689, until a few years after the commencement of the eighteenth century, we find the names of Edward Shippen *, Anthony Morris, Jonathan Dickinson, Isaac Norris, Nicholas Waln, and James Logan †.

time returned to the episcopal church. He was a man of learning and talents; but arrogant, vain, and given to litigation.

* Edward Shippen was early and much distinguished in Pennsylvania. He came from England to Massachusetts to avoid persecution; but belonging to the society of friends, he met with no better treatment in New England than in his own country. He therefore removed to Pennsylvania soon after Mr. Penn's arrival, and became conspicuous and useful in the new colony. He was successively speaker of the house of assembly, member of the governor's council, and the first mayor of the city of Philadelphia. His descendants have continued to be persons of distinction to the present day.

† James Logan, mentioned in a former chapter as a distinguished botanist, was born at Lurgan, in Ireland, in the year 1674. In 1699 he came to Pennsylvania, in company with William Penn, under whose patronage he was much employed in public affairs. He held, in succession, the several offices of provincial secretary, commissioner of property, chief justice, and for near two years discharged the duties of governor, as president of the council. He died in 1751, at Stenton, his country seat, near Germantown, where he had long enjoyed a dignified retirement, devoted to study, and much employed in corresponding with learned men in the different parts of Europe. He was

The greater part of these gentlemen were among the founders of the academy above mentioned, and all of them were, for a number of years afterward, its zealous and diligent supporters.

About the year 1730 a spring was given to the progress of literature in Pennsylvania, and the adjacent colonies, by the exertions of some presbyterian clergymen and others, most of whom had a short time before arrived from Europe, and who embarked with a laudable zeal in the promotion of knowledge. The first of these was the rev. William Tennant, an emigrant from Ireland, who, about the year last mentioned, established at Neshaminy, in the neighbourhood of Philadelphia, an academy, which was more particu-

well versed in both ancient and modern learning; had made considerable proficiency in oriental literature; was a master of the Greek, Latin, French, and German languages; and had a very respectable degree of skill in mathematics, natural and moral philosophy, and natural history. His principal works are the following: 1. *Experimenta et Meletemata de Plantarum Generatione, &c.*, printed at Leyden in 1739, and afterwards in London, by Dr. Fothergill, in 1747. 2. *Canonum pro inveniendis Refractionum, tum simplicium, tum in lentibus duplicium focis, Demonstrationes Geometricæ, &c.*, also printed at Leyden in 1739; and, 3. in his old age he translated Cicero's treatise *De Senectute*, with explanatory notes, which was published with a recommendatory preface by Dr. Franklin in 1744. Mr. Logan had, with great care and pains, collected a *library* of more than *three thousand volumes*, which, at that time, was by far the largest in Pennsylvania, and particularly rich in works in the Latin and Greek languages, and in the most curious, excellent, and rare scientific publications. This valuable collection of books, usually called the *Loganian* library, was bequeathed by its possessor to the citizens of Philadelphia, and has been since deposited in one of the apartments belonging to the library company of that city.—Proud's *History of Pennsylvania*, vol. i, p. 478, *&c.*

larly intended for the education of ministers for the presbyterian church*. This institution continued to flourish for some time, and was the means of forming a number of good scholars, and distinguished professional characters. When it began to decline, the rev. Mr. Roan, a learned and able divine, also of the presbyterian church, erected another academy at Neshaminy, in the vicinity of the former. Mr. Roan, as well as his predecessor, is entitled to grateful remembrance for his zeal and success in promoting useful knowledge.

About this time also Mr. Theophilus Grew† from England, Mr. Annan from Scotland, and Mr. Stevenson from Ireland, set up grammar schools in Philadelphia, in which the dead languages were taught with great skill and assiduity. Mr. Grew was the first person in Pennsylvania

* Mr. William Tennant had been a clergyman in the established church of Ireland before he came to America. Soon after his arrival he renounced his connexion with the episcopal church, and joined the presbytery of Philadelphia. He was much celebrated for his accurate and profound acquaintance with the Latin and Greek classics, and taught them with great success in his academy on the Neshaminy, which was called at that time his *Log college*, from the edifice in which his instruction was carried on being built of logs. Mr. Tennant had four sons, Gilbert, William, John, and Charles, who were all distinguished and useful clergymen, and whose praise has long been in the churches.

† Theophilus Grew was probably a son or grandson of the celebrated botanist bearing the same name, who, in 1676, first suggested the *sexual doctrine* of vegetables to the Royal Society of London. The former was much distinguished as a mathematician, and was afterward professor of mathematics in the college of Philadelphia.

who undertook to teach the English language grammatically. By the aid of these teachers some of the oldest and most respectable inhabitants of Pennsylvania, now living, were initiated into the elements of English and classical knowledge.

About the year 1740 the rev. Dr. Francis Allison opened an academy for teaching the Latin and Greek classics and the sciences at New London, in Chester county, Pennsylvania *. Here he began that course of public instruction, and that zeal for the diffusion of general knowledge, which ended only with his life, and to which Pennsylvania owes much of that taste for solid learning, and particularly for classic literature, for which many of her eminent characters have been so laudably distinguished. Not long afterward the rev. Samuel Blair opened an academy at Fog's Manor, also in Chester county, on nearly the same plan of education with that which was adopted in Dr. Allison's seminary, but with more particular attention to the study of theology as a science. Mr. Blair was a man of respectable talents as

* The rev. Francis Allison, D. D., was born in Ireland, in the year 1705. He received an excellent classical education at an academy in the north of that kingdom, under the particular inspection of the bishop of Raphoe, and afterward completed his studies at the university of Glasgow. He came to America in 1735, and was the pastor of a presbyterian church in Chester county, Pennsylvania, until about the year 1753, when he was chosen rector of the academy in Philadelphia. Beside an unusually accurate and profound acquaintance with the Latin and Greek classics, he was well informed in moral philosophy, history, and general literature. He died in 1779, in the seventy-fourth year of his age.

well as learning *, and was eminently serviceable to that part of the country as a teacher of human knowledge, as well as a minister of the Gospel. From this "school of the prophets," as it was frequently called, there issued forth many excellent pupils, who did honour to their instructor both as scholars and Christian ministers †. The next institution of this kind was the academy opened a few years after Mr. Blair's, by the rev. Dr. Samuel Finley ‡, at West Nottingham, in Chester county, in which a number of young persons were instructed in the languages and sciences, and some in particular trained up to usefulness and honour in the Christian church §.

Before the institution of these academies, that is, anterior to the year 1730, there was very little

* The rev. Samuel Blair was a native of Ireland. He came to America very early in life, and was one of Mr. Tennant's pupils, in his academy at Neshaminy. He was considered not only as one of the most learned and able, but also as one of the most venerable, pious, and excellent men of his day.

† Among the distinguished characters who received their classical and theological education at this seminary, were the rev. Samuel Davies, afterwards president of the college of New Jersey; the rev. Dr. Rogers, of New York; the rev. Messrs. Alexander Cummings, James Finley, Hugh Henry, and a number of other respectable clergymen.

‡ The rev. Dr. Finley, afterwards president of the college of New Jersey, was a native of Ireland. He came to America in early life, having first received an excellent education in his native country, and a short time after his arrival was licensed by the presbytery of New Brunswick. The eminence which he subsequently attained is well known.

§ Some of the facts and names above stated were received by the author from his venerable colleague, the rev Dr. Rogers, and from Dr. Hugh Williamson.

taste for classical learning in the middle colonies of America. It is true, the number of respectable divines, physicians, and lawyers, was not small, but the greater part of those who had attained to any eminence had received their education in Europe, and almost all the instructors in academies or schools were emigrants from Great Britain or Ireland. But from this period a new era commenced. Native Americans began to discover a taste for both ancient and modern literature, and the interests of liberal knowledge began to assume a more promising aspect.

It is generally known that the clergy, in all civilised nations, are the chief promoters of the instruction of youth. Accordingly, it is a remarkable fact, that in all those parts of our country in which the clergy are most numerous, pious, and exemplary, literature is most popular; and in reviewing the literary history of the several American states, we find that useful knowledge has been most early and most generally encouraged in those parts of the country in which clergymen of good character were most early and generally settled. This remark was strikingly confirmed and exemplified in Pennsylvania and New Jersey, at the period of which we are now speaking. The exertions made by some of the clergy of these colonies, at this period, for the promotion of literature, were unwearied and persevering, and deserve the most grateful acknowledgements. The synod of Philadelphia embarked in this cause with great zeal. They particularly favoured the academies of Dr. Allison and Mr. Blair, before mentioned. To the former they agreed to pay a

certain sum annually, that he might be enabled to render his seminary more extensive in its plan, and especially to educate for the service of the church such pious young men as might not be able of themselves to bear the expense of an academic course *.

But the clergy and others of the presbyterian church, soon finding that the provision heretofore made by them for the encouragement of literature was inadequate, began to form designs of more extensive and permanent utility. In the year 1746 a plan of a college was formed by a few distinguished clergymen of this denomination, in the states of New York and New Jersey †, aided

* When Dr. Allison, after a few years, removed to Philadelphia, and was appointed vice-provost of the college erected there, his academy at *New London* was transferred to *New Ark*, a pleasant village in the state of Delaware, where it was put under the care of the rev. Mr. M'Dowell, a respectable presbyterian clergyman, who had received his education at the university of Edinburgh. This institution continued for a number of years under the patronage of the presbyterian church; and was the means of forming a number of excellent scholars, not only for the Gospel ministry, but also for the other learned professions.

† Among these were, 1. The rev. Jonathan Dickinson, a native of Connecticut, and an alumnus of Yale college; a man of learning, of distinguished talents, and much celebrated as a preacher. He was for some years minister of the presbyterian church at Elizabeth Town, in New Jersey. 2. The rev. Aaron Burr, also a native of Connecticut, and a graduate of Yale college, who was called, in 1742, to take charge of the Presbyterian church at New Ark, in New Jersey, and who was so eminent as an able and learned divine, and an accomplished scholar, that he was afterwards unanimously elected president of the college which he was instrumental in founding. He was the father of Aaron Burr, esq., the present vice-president of the United States. 3. The rev. Ebenezer Pemberton, a native of Massachusetts, and

by some gentlemen of literary character and liberal views, of the same religious communion*. The charter was obtained, and the college commenced its labours in Elizabeth Town, New Jersey, in the year above mentioned, under the presidency of the rev. Jonathan Dickinson, who was then pastor of the presbyterian church in that town. Mr. Dickinson dying the next year, the college was removed to New Ark, in the same province, and the rev. Mr. Burr elected to the office of president; from which place it was finally removed in 1757 to Princeton, which had been

a son of Harvard college, a man of respectable abilities and information. He was, at this time, pastor of the presbyterian church in the city of New York, from which he removed to Boston, and died, many years afterwards, minister of a church in that town.

* The most distinguished of the lay gentlemen who aided in the erection of this college, by their councils, property, and influence, were the three following: 1. William Smith, esq., a native of England, who came to America about the year 1715, and received a liberal education in Yale college. He was bred a lawyer; attained great eminence at the bar, both for erudition and eloquence, and was afterwards one of the judges of the supreme court of the province. 2. Peter Vanbrugh Livingston, esq., a native of New York, and descended from one of the oldest and most respectable families who migrated thither from Great Britain. He also received his education at Yale college, and was long distinguished as a judicious, well informed, and public-spirited man. 3. William Peartree Smith, esq., also a native of New York, a man of considerable talents and reading. It is believed he was an alumnus of the same college. At the period of which we are speaking he resided in New York, but afterwards removed to New Jersey, where, after sustaining a number of public honours, he died a few years ago. Beside these, some other laymen might be mentioned who were animated with a literary spirit, and embarked with zeal in the same cause; but our limits forbid more minute details.

agreed upon as its permanent situation *. The circumstances attending the establishment of this college; the zeal for the promotion of literature, which was indicated by its erection, and which it served afterwards greatly to increase; and the many distinguished characters which it has contributed to form, render it, beyond all doubt, one of the most conspicuous institutions in America, and one of those the history and influence of which are most worthy of being traced.

While these measures for the advancement of literature were proceeding thus favourably, Benjamin Franklin † appeared in Pennsylvania, and began to distinguish himself by his exertions for promoting useful knowledge. The original genius of this celebrated man; his sound practical understanding; his scientific discoveries; and his zeal and unwearied assiduity in forwarding every pur-

* It ought not to pass unnoticed, that the middle colonies were much indebted for their progress in literature, at this time, to New England. The first three presidents of New Jersey college were born and educated in that country, as were also a considerable number of the other active and enlightened promoters of learning then residing in New York, New Jersey, and Pennsylvania.

† Benjamin Franklin was born in Boston in the year 1706. He first came to Philadelphia in the autumn of 1723, in the character of a journeyman printer; established himself there in this business on his own account in 1729, and soon began to print a newspaper. In 1732 he commenced the publication of *Poor Richard's Almanac*; and from this time till about the year 1752, when he made his grand discoveries in electricity, was gradually rising in reputation and usefulness. His political character and activity, beside being irrelative to the present subject, are too well known to render any attempt to detail them in this place either necessary or proper.

suit which had for its object the progress of literature, are well known, and have been applauded not only by his countrymen, but also by the learned of all nations *. North America in general, and in particular Pennsylvania, owes a large debt of gratitude to this man. He had great influence in awakening and directing the attention of those around him to literature, science, and useful arts of every kind. He was one of the first native Americans who succeeded in cultivating an easy, unaffected, and polished style of writing †.

* A late writer in the *Monthly Magazine* (see the *Supplement* to vol. xiv), among other severe remarks on the state of American literature, affects to speak with great contempt of the character and writings of Dr. Franklin. An essay which discovers so much ignorance, weakness, and inconsistency would not be noticed in this place, did it not afford an opportunity of doing justice to a man to whom his country owes much. That the character and opinions of Dr. Franklin were, in all respects, faultless, is by no means contended. This was far from being the case. But that he had an original genius, a strong mind, and much practical wisdom; that he made many valuable contributions to science and the arts; and that his writings have been much read, translated into various languages, and quoted with respect by the learned of foreign countries, can be questioned by no one who is not as ignorant as he is prejudiced.

† The anonymous writer above mentioned, after bestowing a number of severe epithets on the American style of writing, some of which are not altogether unmerited, represents its writers as having generally formed their manner after that of Dr. Franklin. It is scarcely possible to conceive of a remark more unfounded, or that discovers a more entire unacquaintance with the subject which he undertakes to discuss. It is generally known to well informed persons, that Franklin, as he tells us himself in his account of his own life, took the style of Mr. Addison for his model; and though he was far from attaining a style equal to that of the illustrious British essayist, yet he certainly wrote with an ease, simplicity, sprightliness, purity, and perspicuity, highly

He was the projector and founder of some of the most useful literary institutions which America can boast; and may justly be considered as having given an impulse to the public mind, in favour of liberal knowledge, which forms a distinguished era in the history of that country.

Hitherto scarcely any native American had attracted attention among the learned of Europe, or by his writings or discoveries turned their eyes to this new world. The first persons who attained this honour, in any considerable degree, were the rev. Mr. Jonathan Edwards*, the celebrated

respectable, and very different from the affectation, the bombast, and the perpetual use of unauthorised terms and phrases, which characterise too many American writers in later times, and from which some popular writers of Great Britain are by no means exempt.

* The rev. Jonathan Edwards was born at Windsor, in Connecticut, October 5, 1703. He received his education at Yale college, where he graduated bachelor of arts in 1720. He early began to preach, and the presbyterian church of New York, then in its infancy, had the honour of enjoying his ministrations for eight months, in the year 1723. He afterwards became the pastor of a congregational church at Northampton, in Massachusetts; and in 1757 was chosen president of the college of New Jersey, in which office he continued till his death, which took place March 22, 1758, in the fifty-fifth year of his age. This illustrious man was very respectably learned in the Latin, Greek, and Hebrew languages, and also in the mathematics, and natural philosophy; but in theological, moral, and metaphysical science, he discovered an acuteness, vigour, and comprehensiveness of mind, which decidedly place him in the very first rank of great men belonging to the age in which he lived. He read Locke's *Essay on Human Understanding* at thirteen years of age, and declared to an intimate friend a short time before his death, that, at that early age, "he was as much engaged, and had more pleasure in studying this work, than the most greedy miser could

theological and metaphysical writer, and Dr. Benjamin Franklin. Though the genius, talents, and general character of no two persons could be more different, yet each in his way gained high and extensive celebrity, and for the first time convinced the literati of foreign countries, that America had given birth to philosophers who were capable of instructing them.

The arrival in America of the rev. Mr. George Berkeley, then dean of Derry, afterward bishop of Cloyne, deserves to be noticed in the literary history of America, not only as a remarkable event, but also as one which had some influence on the progress of literature, particularly in Rhode Island and Connecticut. This great man, in 1729, nineteen years after the publication of the celebrated work in which he denied the existence of the material world, came to America with a particular view to the establishment of an episcopal college, to aid in the missionary cause *. He landed at Newport, in Rhode Island,

have in gathering up handfuls of silver or gold from a newly discovered mine." The fruits of this early initiation into metaphysical science were afterwards laid before the public in his *Inquiry into the Freedom of the Will, &c.*, a work which has been pronounced "one of the greatest efforts of the human mind," which was received with high approbation in Europe; and which has been, ever since its publication, quoted as a great standard work on the subject of which it treats.

* Dr. Berkeley was born in Ireland in the year 1684, and received his education at Trinity college, Dublin. About the year 1724 he was made dean of Derry; and in 1725 published a plan, which he pursued with great zeal, of establishing a college in one of the Bermudas, or Summer Islands, the principal objects of which were, the obtaining a better supply of missionaries for the colonies, and the conversion of the American Indi-

and purchased a country seat and farm in the neighbourhood of that town, where he resided about two years and a half: and though various circumstances discouraged him from prosecuting his original design, and induced him to return to Europe without effecting it, yet his visit was by no means without its utility. The presence and conversation of a man so illustrious for talents, learning, virtue, and social attractions, could not fail of giving a spring to the literary diligence and ambition of many who enjoyed his acquaintance. He visited the various literary institutions which came within his reach, and wrote and spoke in their favour, as opportunities were afforded, and their exigencies required. He exer-

ans to Christianity. The plan was favourably received, not only by his friends, but also by the government. He obtained a charter for the proposed college, in which he was named as the first president; and also a parliamentary grant of 20000*l.* sterling for its support. In the month of February, in the year 1729, he came to America for the purpose of putting his plan into execution, and brought with him his lady, whom he had married but a few months before. Soon after his arrival he became convinced that the plan of establishing the proposed college in the Bermuda isles was by no means an eligible one; he therefore wrote to his friends in England, requesting them to obtain an alteration in the charter, fixing the institution on some part of the American continent (which would probably have been New York), and soliciting the immediate payment of the sum which had been granted for its establishment. Finding, however, after a delay of two years and a half, that there was no probability of the money being paid, and considering his plan as impracticable, he embarked at Boston in September 1731, and returned to England. In 1733 he was promoted to the bishopric of Cloyne, and in January 1753 he died in the city of Oxford, universally respected and lamented. While he resided at Rhode Island, he composed his *Alciphron*, or *Minute Philosopher*.

cised particular munificence toward Yale college, to which his attention was directed by one of the trustees of the institution with whom he was acquainted, and also by the rev. Mr. Williams, then president of the college, with whom he corresponded. Soon after his return to Europe he sent, as a gift to this college, a deed of the farm which he held in Rhode Island, which he directed to be appropriated to the maintenance of the three best classical scholars who should reside at college at least nine months in a year, in each of the three years, between their first and second degrees *; and all surplussages of money, arising from accidental vacancies, to be distributed in Greek and Latin books to such under graduate students as should make the best composition or declamation in the Latin tongue, upon such a moral theme as should be given them. This donation is still held by the college, and the distribution of the *Dean's Bounty* is annually and faithfully performed, agreeably to the directions of the donor. While at Newport, the dean also presented a copy of his own works to the college library; and after his return to Europe, partly out of his own estate, but principally with monies which he procured for the purpose by donation

* The dean directed, that on the sixth of May annually, or, in case that should be Sunday, on the seventh, the candidates for this bounty should be publicly examined by the president of the college, and the senior episcopal missionary within the colony who should then be present; and in case none should be present, then by the president only: and in case the president and senior missionary should not agree in deciding on the best scholars, that then the case should be decided by lot.

in England, he made an additional present of nearly one thousand volumes to the same library *.

In 1748 a public library was established at Newport, in Rhode Island, by Abraham Redwood, esq., an opulent gentleman, who wished to encourage literature. It was founded for the use of all denominations of Christians indiscriminately: a company was afterwards incorporated by the legislature, for the purpose of holding and superintending it; and large additions were made to it by donations from Europe and elsewhere. This library afforded to the inhabitants of Rhode Island means of literary improvement which they had never before enjoyed; and no doubt contributed something to the extension of a taste for letters and science in that colony †.

The influence of Dr. Franklin's literary zeal and industry soon began to display itself in Pennsylvania. In 1742, an association, which had been formed at his instance, and by his unwearied exertions some time before, was incorporated, by the name of "The Library Company of Philadelphia." This institution was greatly encouraged

* The attention and munificence of the dean to Yale college, when considered in all its circumstances, reflects much honour on his disinterestedness and liberality. When it is considered that he was warmly attached to the episcopal church, and that he came to America for the express purpose of founding an episcopal college; his catholicism, in patronising an institution under the exclusive direction of a different denomination, will appear worthy of high praise.

† This library, which bore the name of its founder, was in a great measure destroyed during the revolutionary war.

by the friends of literature in America and in Great Britain. Valuable contributions were made to it, not only by Franklin, and his literary friends and countrymen, but also by his correspondent Mr. Collinson, by Thomas and Richard Penn, and others. From that period to the present it has been continually growing; and now, in conjunction with the *Loganian* library, forms the largest and best collection of books in the United States *.

In 1749 Dr. Franklin drew up the plan of an academy, to be erected in the city of Philadelphia, which was adopted and liberally encouraged; and the seminary was established in the beginning of the following year. In 1753, through the interposition of his learned and philosophic friend Mr. Collinson †, a charter was obtained for this academy, from the proprietors of the province, accompanied with a liberal donation towards its funds. In 1755 an additional charter was granted, extending the plan of the

* The *city library* of Philadelphia contains, at present, between eleven and twelve thousand volumes—say eleven thousand five hundred. The *Loganian* library consists of about three thousand five hundred, making in the whole a collection of fifteen thousand volumes.

† Peter Collinson, F. R. S., was a native of Westmoreland, and resided the greater part of his life in London. He was much distinguished by his fondness for natural history, and also by his desire and exertions to promote literature and science in the American colonies. He long maintained a friendly correspondence with lieutenant-governor Colden of New York, and with Dr. Franklin, as well as with other American gentlemen. He died in 1768.

institution, and forming it into a college *. The first provost was the rev. Dr. William Smith †, whose popular talents, and taste in polite literature, contributed greatly to raise the character of the college. He was principally assisted by the rev. Dr. Francis Allison, who had been called from

* In the establishment of this seminary on its original plan, and in finally erecting it into a college, Dr. Franklin is said to have been chiefly aided by the councils and exertions of chief justice Allen, who was much distinguished as a friend to literature; by Thomas Hopkinson, esq., one of the governor's council; by the rev. Richard Peters, secretary of the province; by Tench Francis, esq., attorney-general; and by Dr. Phineas Bond, an eminent physician; all residing in Philadelphia.

† The rev. Dr. William Smith was a native of Scotland, and received his education at the university of Aberdeen, where he graduated in March 1747. The three following years he spent in teaching in one of the parochial schools of that country; and in 1750 was sent up to London, in pursuance of some plan for the better endowment of the said schools. In London he was induced to relinquish the employment in which he was engaged, and to embark for America, where he soon afterward arrived. Here he was employed upwards of two years as a private tutor in the family of governor Martin, on Long Island, in the province of New York. In this situation he was invited to take charge of the college in Philadelphia, to which he consented; and after revisiting England, and receiving regular ordination in the episcopal church (which took place in December 1753), he returned to America; and in the month of May, 1754, was placed at the head of this infant seminary. The talents of this gentleman, and his history, from the time of his induction into the office of provost, until his death, in the month of May 1803, are generally known. He gave important aid in the formation and establishment of another college in the state of Maryland; and certainly rendered important services to the literary interests of America. It is expected that his *works*, in several volumes, will soon be laid before the public.

his academy, before mentioned, to the office of viceprovost in this seminary; and who, perhaps, still more eminently contributed to its reputation for solid learning and useful knowledge.

The effects of this establishment in awakening the attention of the public to the interests of learning, and in exciting a taste for literature in Pennsylvania, were soon visible. The first commencement took place in a short time after the second charter was obtained, when the honours of the institution were conferred on six young gentlemen *, most of whom became afterward both conspicuous and useful literary characters, and were honourable pledges of the benign effects which this college was destined to produce on the literature and science, not only of Pennsylvania, but also of the neighbouring states.

It has already been mentioned, that Dr. Franklin's exertions were eminently useful in promoting the cause of liberal knowledge in Pennsylvania. His experiments on *electricity* were peculiarly fitted to awaken and stimulate the public mind, and were actually found to produce this effect, in a very remarkable degree, both in Europe and America. He was soon joined by Mr. Thomas Hopkinson, the rev. Ebenezer Kinnersley, Mr. Philip Syng, and others, who also became distinguished by their experiments in the same branch of philosophy. Mr. Kinnersley was

* These were, Jacob Duche, Samuel Magaw, James Latta, Hugh Williamson, Francis Hopkinson, and ——— Hall. The first three became eminent clergymen; and two of the others have been long celebrated in America, for their literary attainments, and their useful services in civil life.

afterward appointed a professor in the college of Philadelphia, and was one of the active promoters of useful knowledge of his day *.

In the province of New York the interests of literature had been more than commonly neglected before the middle of the eighteenth century. Few of the first settlers had any literary taste or acquirements; and though now and then an individual came to the province from Europe, who was learned, and disposed to cultivate letters †, yet the number of these was so small, and the great body of the inhabitants so little willing to second any endeavours which they might make for the advancement of knowledge, that every thing relating to education was in the most deplorable state. Some of the more wealthy inhabitants sent their sons to Holland, or to Great Britain, to be educated; while a few others, to whom this would have been inconvenient, placed their

* Mr. Kinnersley was bred a baptist, and was for some time a preacher of that denomination; but afterward, taking some offence, he left the baptist communion, laid aside his clerical character, and joined the episcopal church.

† Governor Stuyvesant appears to have been a man of respectable attainments in literature. Out of the small number of clergymen who came to the province in early times, a few had made considerable acquirements in letters. The ancestors of the Rensalaer, the Bayard, the Livingston, and the Morris families, and a few others, who first came to the colony, had also been liberally educated. Two or three of the governors, who were sent at different times, were fond of literature, and made some exertions to promote it. Of this character, especially, was governor Burnet. To these might be added some other names, did our limits allow of more minute details. But the influence of these could not be great, when the mass of the people were regardless of every literary object.

children in Yale college. From these sources almost all the natives of New York, who, prior to the middle of the eighteenth century, enjoyed the advantages of a liberal education, had received the elements of knowledge.

In the year 1729 a small library was sent over to the city of New York, by the "Society for propagating the Gospel in foreign parts," for the use of the clergy, and other gentlemen of this and the neighbouring governments of Connecticut, New Jersey, and Pennsylvania. This was the first public library that was introduced into the province; and it doubtless contributed, in some degree, to awaken and extend a taste for reading.

In 1754 a society was established in the city of New York, for the purpose of forming a public library on a larger scale, and upon a more liberal plan. This association soon received the countenance of the public, and immediately began to collect books. The library, thus begun, has continued to grow to the present time, and now holds the *third* place among the public libraries of the United States*. This establishment furnished the first opportunity enjoyed by the citizens of New York, in general, of obtaining access to a large collection of books.

About this time some of the inhabitants of New York (the greater part, if not all, belonging to the episcopal church), began to form the design of establishing a seminary of learning on a

* The Philadelphia library, including the *Loganian*, contains about fifteen thousand volumes; the library belonging to Harvard college about thirteen thousand; and the library of New York about seven thousand.

more extensive plan than any which had hitherto been known in the province. Animated by the exertions made to found a college at Philadelphia, they undertook to erect a similar institution in their own city. At the head of the association formed for this purpose was Mr. James de Lancey *, lieutenant-governor of the province, who, beside the aid of the rev. Dr. Barclay †, and other literary gentlemen of New York, was also assisted by the counsels and cooperation of the rev. Dr. Johnson ‡, of Connecticut, and the

* Mr. James de Lancey was a native of New York. His father, Mr. Stephen de Lancey, came from Normandy, in France, among the protestants who fled from persecution in that country. The son was sent to England for his education, where, about the year 1725, he entered the university of Cambridge. Here he had the honour of having for his tutor Dr. Herring, afterward archbishop of Canterbury. Soon after his return home in 1729, he was appointed a member of the governor's council; afterward filled the office of chief justice; became lieutenant-governor in 1753; and had long an extensive and commanding influence in the province. He died about the year 1760.

† The rev. Dr. Henry Barclay was a native of Albany, and received a liberal education at Yale college, where he graduated in the year 1734. Soon after leaving college he went to Great Britain, where he received orders in the episcopal church, and was appointed missionary to the Mohawk Indians. Having served in this capacity for some years, he was called to the city of New York, and appointed rector of Trinity church. In this respectable situation he continued till his death, which took place in 1765.

‡ The rev. Dr. Samuel Johnson was born at Guilford, in Connecticut, October 14, 1696. He was educated at Yale college, where he took his first degree in the year 1714. In 1720 he was ordained by a council of congregational ministers, and installed pastor of a church at West Haven, in Connecticut. After remaining in this situation a little more than two years, he altered his views concerning the doctrine, worship, and government of

rev. Dr. Chandler*, of New Jersey. In the beginning of the year 1753, an act of assembly was passed for the establishment of the college, and making some provision, by a succession of lotteries, for its support. In October 1754 a regular charter of incorporation was obtained, and the rev. Dr. Johnson named therein as the first

the church with which he was connected, and went to England, where he took orders in the episcopal church in the month of March 1723. From this time till the year 1754, Dr. Johnson resided at Stratford, in Connecticut, where he had the pastoral care of an episcopal church. In the last mentioned year he removed to New York, and entered on the duties of his office as president of *King's college*. In this station he continued till February 1763, when he resigned, returned to Stratford, and there again exercised his ministry till his death, which happened in January 1772. Dr. Johnson was a man of distinguished talents and learning. He was intimately acquainted with dean Berkeley, during his residence in Rhode island; long maintained a friendly correspondence with him; and became a convert to the peculiar metaphysical opinions of that great man. Beside other smaller works, he published a Compendium of *Logic*, and another of *Ethics*, which were printed together in an octavo volume in 1752, by Dr. Franklin, then residing in Philadelphia. He also published a *Hebrew Grammar* in 1767, which evinced an accurate acquaintance with that language.---For this account of Dr. Johnson, as well as for some other facts and names in the history of American literature, the author is indebted to a manuscript *Life of* Dr. Johnson, drawn up by the rev. Dr. Chandler, mentioned in the following note.

* The rev. Dr. Thomas Bradbury Chandler was a native of Connecticut, and received his education in Yale college, where he graduated *master of arts* in the year 1745. He soon afterward went to England, took orders in the episcopal church, and settled in the ministry at Elizabeth Town, New Jersey, where he long maintained a high character both for talents and erudition. He was honoured with the degree of *doctor of divinity* by the university of Oxford. His respectable and useful life terminated in the year 1790.

president. He entered on the duties of his office in the month of July the same year, and held the first commencement in June 1758, when eight young gentlemen, alumni of the college, were admitted to its honours*.

The corporation of Trinity church, in the city of New York, early countenanced this college, and made a valuable donation to its funds. The institution also received important aid from the honourable Joseph Murray†, one of his majesty's council, and attorney-general for the province. He was a great friend to literature, and left the whole of his estate, consisting of books, lands, and other property, to the college. The names of some other benefactors, but less conspicuous than these, are to be found on the records of the institution.

From this period we may date the rise of a literary spirit in the province of New York. It is true, this spirit was possessed for a long time afterward by comparatively few individuals, and produced effects by no means so general or important as the friends of knowledge could wish; but from this time the advantages of liberal education were more frequently enjoyed in the pro-

* The names of these young gentlemen are, Samuel Verplanck, Rudolphus Ritzema, Philip van Cortlandt, Samuel Provoost, Joshua Bloomer, Joseph Reed, Josiah Ogden, and Isaac Ogden.

† Joseph Murray, esq., was a native, it is believed, of Great Britain, and received his education there. The value of the estate which he left to the college amounted to about ten thousand pounds New York currency, or twenty-five thousand dollars.

vince, and some of those who were destined afterward to fill the most conspicuous stations, began to receive at home that instruction which before could only be received in other colonies, or in European seminaries.

The interests of literature were at this time going on prosperously in Massachusetts. A few years before, Mr. Thomas Hollis*, of London, an active friend to literature, as well as to civil and religious liberty, had made several valuable donations to the university of Cambridge. He was followed in this munificence by his nephew, of the same benevolent disposition. To these generous benefactors that institution owes much. They established two professorships, one of theology, the other of mathematics and natural philosophy; they gave many valuable books to the university library†; and made other presents of considerable value. One of the college buildings erected in 1762 was called, in memory of these benefactors, Hollis Hall.

While the Hollis family exercised this generosity towards the institution, benefactors were not wanting in America to imitate their laudable mu-

† The library of Harvard college took its rise soon after that institution was founded. In 1764 it consisted of about five thousand volumes. In the winter of that year the greater part of this library was destroyed by fire, with one of the college buildings. Since that time it has been gradually growing, and now consists of about thirteen thousand volumes. The chief contributors to this library were the Hollis family, Thomas Hancock, esq., governor Bowdoin, Dr. Franklin, and several others.

nificence. Thomas Hancock*, esq., of Boston, founded a professorship of oriental languages, and contributed generously to the enlargement of the library. Nicholas Boylstone, and Edward Hopkins, esquires, also deserve to be respectively mentioned among the benefactors of this important seminary, and as enlightened friends to literature and science.

In the former half of the eighteenth century, by far the greater portion of the book-printing done in the American colonies was executed in Boston. No where did so many original American publications issue from the press; and no where was so much enterprise manifested in republishing European works. These works, it is true, were chiefly on theological subjects, and comparatively few of a literary or scientific nature were circulated among the people, by means of American presses; but still the books which were edited had a tendency to enlarge the public mind, and to render a taste for reading more general.

In Connecticut, at this time, literature and science were on the whole gaining ground. The appointment of the rev. Dr. Cutler†, as presi-

* Thomas Hancock, esq., was uncle to the honourable John Hancock, president of congress, and afterward governor of Massachusetts. The nephew, as well as the uncle, was also a benefactor to the college.

† The rev. Dr. Timothy Cutler received his education at Harvard college, where he graduated in 1701. In 1710 he was ordained and installed minister of a church in Stratford, according to the constitution of the churches in Connecticut. In 1719 he was chosen president of Yale college, and entered on the duties of the office the same year. In 1722 he relinquished the

dent of Yale College, was an auspicious event to that institution. He was a man of profound and general learning in the various branches of knowledge cultivated in his day, particularly in oriental literature, and presided over the seminary which he was called to superintend, with dignity, usefulness, and general approbation. He was succeeded by the rev. Elisha Williams *, who was inaugurated in the year 1726. Under his administration also the college flourished, especially in the study of classic literature, logic, metaphysics, and moral philosophy. The successor of president Williams was still more illustrious. This was the rev. Thomas Clap †, who was chosen

communion of the congregational church, and soon afterward went to England, and took orders in the episcopal church. He received the degree of *doctor in divinity* from both the universities of Oxford and Cambridge. He became rector of Christ Church, in Boston, in the year 1723, where he died in 1765. He is represented to have been a man of strong natural powers, and of extensive learning. He was well acquainted with classic literature, and was one of the best oriental scholars ever educated in America. The rev. Dr. Stiles says, "he had more knowledge of the Arabic than any man in New England before him, except president Chauncey, and his disciple the first Mr. Thatcher." Dr. Cutler was also well skilled in logic, metaphysics, moral philosophy, theology, and ecclesiastical history.

* Mr. Williams was a good classical scholar, and well versed in logic, metaphysics, and ethics. The rev. Dr. Doddridge, who was acquainted with him in England, gave him this comprehensive character. "I look upon Mr. Williams to be one of the most valuable men upon earth. He has joined to an ardent sense of religion, solid learning, consummate prudence, great candour, and a certain nobleness of soul, capable of contriving and acting the greatest things, without seeming to be conscious of his having done them."

† The rev. Thomas Clap was born at Scituate, in Massachu-

president in 1739, and formally inducted into office the next year. He appears to have been one of the most profound and accurate scholars ever bred in Connecticut; and during the course of his presidency, which continued till 1767, he succeeded in producing a greater attention than had been before paid to the abstruse sciences, particularly to mathematics, astronomy, and the various branches of natural philosophy. This period indeed may be considered as forming an era in the literary history of Connecticut.

Passing on to Virginia, a few facts and names appear there about this time which are worthy of notice*. The first *printer* introduced in that colony was about the year 1726, when William Parks settled there in that capacity. The first work of any consequence printed in the colony was the body of *Laws*, in folio, in 1733, by the person above mentioned. The foundation of a

setts, in 1703; graduated at Harvard college in 1722; settled in the ministry at Windham, in Connecticut, in 1726; became president of Yale college in 1739; and died in 1767. He was respectably learned in the Greek, Latin, and Hebrew languages; but in the higher branches of mathematics, in astronomy, and in the various departments of natural philosophy, he had probably no equal at that time in America, excepting professor Winthrop, of Cambridge. He appears also to have been extensively and profoundly read in history, theology, moral philosophy, canon and civil law, and indeed in most of the objects of study attended to at that time.

* Some of the names and facts mentioned in this section, relating to the progress of letters and science in Virginia, were communicated to the author, in a letter from bishop Madison, of Williamsburgh. The services rendered to the cause of liberal knowledge in America, and particularly in his own state, by this enlightened philosopher and divine, are well known.

library in William and Mary college was early laid. This was augmented from time to time by various means, particularly by private donations from several friends of literature, until it became a very respectable collection. The additions to it within a few years past have been few and small; hence it abounds more in ancient than modern works.

Nor was Virginia by any means, even at this early period, without instances of honourable literary enterprise. The *Histories* of the colony by Stith and Beverley are generally known. The former was a respectable clergyman, and president of the college; and though he did not write elegantly, he was a faithful and judicious historian. The latter wrote with less prolixity and tediousness, but at the same time with a less satisfactory fulness of information. Several other instances of literary exertion at this period in Virginia might be mentioned, did our limits admit of going into further particulars.

Among the promoters of literature in Virginia at this time, it will be proper to mention colonel Byrd, a native of that colony, who had been liberally educated in Great Britain, and possessed a very ample estate. Few private persons in America ever collected so large or so valuable a library as he left. He was a very ardent friend to the diffusion of knowledge, and freely opened his library for the use of all who sought information. Colonel Byrd died about the middle of the century. He wrote a few small tracts, but they

were not of a nature to command much of the public attention at this time.

In North Carolina and Georgia nothing worthy of notice was done for the promotion of literature, before the middle of the eighteenth century. In those provinces there was not until this period a single seminary of learning worthy of the name; no native citizen had been at all distinguished for his attainments in knowledge. Of the few clergymen then residing in those provinces, the greater part were both illiterate and dissipated; and almost all those of the learned professions who were tolerably well informed, were either foreigners or had received their education abroad.

The literary situation of South Carolina, in the former part of the century under review, was much more respectable*. At the commencement of this period all the literary characters in that province were Europeans. The clergy were few, and not more than one of them had been born in the province. The physicians were also Europeans, and chiefly persons who had connexions with the British army or navy. The same may be affirmed of the lawyers: these all resided in Charleston, and were from Great Britain or Ireland. In 1700 a provincial library was established in Charleston, by the munificence of the lords proprietors, and of the rev. Dr. Thomas Bray. This introduced a taste for reading among

* For the greater part of what is here stated respecting South Carolina, the author is indebted to Dr. David Ramsay, of Charleston, who, on application, favoured him with a full and instructive communication on the subject.

a portion of the inhabitants. In 1712 a free school was established in that city, for "instructing the youth of the province in grammar, and other arts and sciences, and useful learning, and also in the Christian religion *." In this seminary the Greek and Latin languages were taught by a succession of able instructors, and some good classical scholars were formed. Beside the free school, several private academies were also formed a few years afterward, and had a useful influence. All the teachers in these seminaries were for a considerable time after their establishment either from Europe or from the northern colonies. The first *printer* appears to have settled in Charleston between the years 1720 and 1730, and the first *newspaper* in the colony was printed in 1730.

Mr. Josiah Smith, who was born in Charleston in the year 1704, graduated at Cambridge, in Massachusetts, in 1725, and afterward became a learned and respectable minister of the presbyterian church, was the first native of South Carolina who received a literary degree†. The next instance of a native of South Carolina receiving academic honours was that of Mr. William Bull,

* In this seminary there were two instructors: a principal, with a salary of 400*l.* sterling *per annum;* and an usher, with a salary of 200*l.*; both paid from the public treasury. These were liberal salaries considering the time, and the situation of the colonists.

† Mr. Smith published a volume of *Sermons* in 1752, and several occasional discourses before and after. He also maintained a learned disputation, in 1739, with the rev. Mr. Fisher, on the right of private judgment. He closed a useful and honourable life in 1781, in the city of Philadelphia, whither he had been induced to flee during the revolutionary war.

who received the degree of *doctor of medicine* at Leyden in 1735*. He was followed by Mr. John Moultrie, who received the same degree from a university in Europe in 1749†. Both of these were eminent for literature and medical science.

The literary foreigners who came to South Carolina at this early period were numerous. Dr. John Lining, a native of Scotland, and a man of excellent education, came to that province as early as 1725 or 1730. He was eminent as a physician and philosopher‡. He corresponded with Dr. Franklin on the subject of electricity, and was the first person who introduced an electrical apparatus into Charleston. Dr. Lionel Chalmers, who came to the colony from Great Britain in the former part of the century, was also much distinguished for medical science, and for his various and extensive knowledge§. Dr. Alexander Garden, also from Great Britain, about the same time was deservedly celebrated as a physician

* The name of Dr. Bull was mentioned in a former chapter. On occasion of his receiving a medical degree at Leyden, he wrote and defended an inaugural dissertation, *De Colica Pictonum*. He was afterward lieutenant-governor of South Carolina.

† Dr. Moultrie wrote and defended a dissertation, *De Febre Flava*. He was afterward lieutenant-governor of East Florida.

‡ In 1740 Dr. Lining prosecuted, and afterward published, a series of judicious statical experiments. And in 1753 he published a *History of the Yellow Fever*, which was the first account of that disease that had been printed on the American continent.

§ Dr. Chalmers published a valuable work on the *Weather and Diseases of South Carolina*, London, 1776. But his most respectable and useful work is an *Essay on Fevers*, published at Charleston in 1767. Beside these, he wrote several smaller publications.

and natural historian. Mr. Mark Catesby, an English naturalist, came to South Carolina in the year 1722, and resided four years in the colony, where he did much for promoting the knowledge of botany and zoölogy*. To these may be added the rev. Isaac Chanler, the rev. Alexander Garden, the rev. Henry Haywood, and the rev. Richard Clarke, all from England, who settled in Carolina as clergymen, and became conspicuous not only by their learning and talents, but also by means of various publications of more or less value, which yet remain to attest the reality of both†.

* Mark Catesby, F.R.S., was born in England in the year 1679. He had an early and strong propensity to the study of natural history; and having some relations in Virginia, he determined to gratify his taste for inquiries of this nature, by exploring a part of the new world. He therefore went to that colony in 1712, where he staid seven years, admiring and collecting the productions of the country. During this period he made numerous botanical communications to his friends in Great Britain. He returned to England in 1719; but soon afterward, encouraged by sir Hans Sloane, Dr. Sherard, and some other naturalists, he determined to make another visit to America, and accordingly embarked for South Carolina, where he arrived in May 1722. He now remained four years in the country, exploring Carolina, Georgia, the Floridas, and the Bahama islands. Returning to England in 1726, he employed himself for a number of years in preparing for publication his great work, entitled *The Natural History of Carolina, Florida, and the Bahama Islands.* The first part of this work appeared in 1730, and it was completed in 1748, in two volumes folio. He died in London in 1749. Gronovius, of Leyden, called a shrub of the *tetrandrous* class *Catesbea*, after him.

† The rev. Isaac Chanler was born at Bristol in 1701, and emigrated to South Carolina in 1733. He settled, as pastor of a baptist church, on Ashly River, in 1736, where he continued

But notwithstanding the literary taste, conversation, and writings, of these individuals, the institutions formed for the diffusion of knowledge were few in number, and by no means of respectable character. For the first thirty years of the eighteenth century the free school before mentioned was the *only* grammar school in South Carolina. For the next forty years there were only *three* in the province, and all these were in Charleston or its vicinity. In 1749 an association was formed in Charleston, for the establishment of a public library; but it was not till toward the close of the century that this institution grew to any high degree of respectability; so that until the revolutionary war it was customary for the more wealthy either to employ private tutors of respectable character in their families, or to send their sons to foreign universities. In one or the other of these ways a large portion of the best scholars and most eminent public characters in the state were formed.

till his death, in 1749. Beside several smaller works, he published *The Doctrines of Glorious Grace unfolded, defended, and practically improved,* quarto, Boston, 1744. The rev. Alexander Garden was a different person from the physician and naturalist of the same name. He wrote several publications on theological subjects. The rev. Henry Haywood arrived in Charleston, from England in 1739; from which time till his death, in 1755, he was minister to the Socinian baptists in that city. He translated into English Dr. Whitby's Treatise on Original Sin; and had prepared for the press a large volume in defence of the Apostolical Constitutions. He published a defence of Dr. Whitby, against Dr. Gill, and also a Catechism. The rev. Richard Clarke, from England, was an elegant classical scholar. He published several pieces on the Prophecies, and on Universal Redemption. He was for some time rector of St. Philip's church in Charleston.

While Catesby and Garden were cultivating natural history in Carolina, this noble branch of science was by no means neglected in some of the other provinces. Paul Dudley, esquire, of Massachusetts, at an early period of the century made some valuable communications to the Royal Society of London on zoölogical and botanical subjects. Lieutenant-governor Colden*, of New

* Cadwallader Colden, esquire, who has been repeatedly mentioned in former chapters, was born in Scotland, February 17, 1688. He was the son of a clergyman; and after having received the elements of a liberal education under the care of his father, he completed his studies at the university of Edinburgh, in 1705. He afterwards applied himself to the study of medicine and mathematical science, until the year 1708, when, allured by the fame of William Penn's colony, and by the invitation of a relative, he went over to Pennsylvania. There he engaged in the practice of physic, until the year 1715, when he returned to his native country. He staid, however, but a short time in Scotland; for the next year, after forming a matrimonial connexion, he sailed a second time to America, where he spent the remainder of his days. In 1718 he removed to New York, but soon afterward relinquished the practice of physic, and became, in succession, surveyor-general of the province, master in chancery, member of the council, and lieutenant-governor. In 1755 he retired with his family to Coldingham, his seat on the Hudson, where he spent the greater portion of his latter years. Here he particularly devoted himself to botanical studies, and to a correspondence with learned men in Europe and America. Both he and his daughter (also a great botanist) corresponded with Linnæus, who, in honour of the latter called a plant of the *tetrandrous* class *Coldenea*. This plant miss Colden had first described. Dr. Colden died in 1776. His principal publications are, *Plantæ Coldinghamenses*, in the *Acta Upsalensia*, for 1743 and 1744; *Principles of Action in Matter*, &c., 4to, London, Dodsley, 1753; *The History of the Five Indian Nations*, two vols, 12mo, 1747; beside several smaller works on *Yellow Fever, On the Cure of the Cancer, On the Malignant Sore Throat,*

York, before mentioned, was much devoted to the study of botany, and made important contributions toward a knowledge of American plants; especially of that part of America which was in the vicinity of his residence. Mr. John Bartram*, of Pennsylvania, was the first native American who conceived and carried into effect the plan of a botanic garden† for the reception and cultivation of indigenous as well as exotic plants, and of travelling for the purpose of accomplishing this plan. He did much to explore the natural history of his native country. Dr. John Mitchell‡,

&c. He was undoubtedly a man of various and extensive learning, of respectable talents, and of great literary industry. See Hardie's *Biography*, vol. ii, p. 131.

* Mr. John Bartram was born near Darby, in Chester county, Pennsylvania, in the year 1701. His grandfather, of the same name, had come to the colony in 1682, with the celebrated William Penn. This self-taught genius early discovered a great thirst for the acquisition of knowledge, and especially of botanical knowledge. He travelled in pursuit of it with unwearied diligence, in various parts of his native country, from Canada to Florida, and made such proficiency in the study that Linnæus is said to have pronounced him the "greatest natural botanist in the world." He corresponded with many of the most distinguished men of science, both in America and in Europe. He was elected a member of several of the most eminent societies and academies abroad, and was at length appointed botanist to his *Britannic majesty* George III. He died in 1777, in the seventy-sixth year of his age.

† It cannot be said that Mr. Bartram formed a *botanic garden*, in the scientific sense of the expression; but he made a large and valuable collection of plants on his farm near Philadelphia, which his sons have kept up to the present day.

‡ Dr. John Mitchell, who was mentioned in a former chapter as having gone from England to Virginia early in the last century, appears to have been a man of observation, acuteness, and

who resided some time in *Virginia*, and Dr. John Clayton *, a native of that country, both rendered important services in investigating the botanical treasures of America. To several of these the lovers of natural history owe a large debt of gratitude; nor can any one take the most super-

enterprise, as well as of learning. His residence in Virginia was chiefly at *Urbanna*, a small town on the Rappahannock, about seventy-three miles from Richmond. He was a great botanist, and seems to have paid particular attention to the *Hybrid* productions. He wrote a useful work on the general principles of botany, containing descriptions of a number of new genera of plants, which was published in 4to in 1769. He also wrote, in 1743, an "*Essay on the Causes of the different Colours of People in different Climates*," which was sent over to Mr. Collinson, and published in the *Philosophical Transactions*, vol. xliii, p. 102—150. Beside these, he published an "*Essay on the Preparations and Uses of the various Kinds of Pot-Ash*," *Philosophical Transactions*, vol. xlv, p. 541—563; and a "*Letter concerning the Force of Electrical Cohesion*," *Philosophical Transactions*, vol. li, p. 390. See *Pulteney's Sketches of the Progress of Botany*, &c., vol. ii, p. 278, &c. It is believed the same man was the author of the *Map of North America*, published in 1755, which he accompanied with a large Pamphlet entitled "*The Contest in America*," and soon followed by another Pamphlet, entitled "*The Present State of Great Britain and North America*," 1767. See *American Husbandry*, &c., vol. i, p. 285.

* Dr. John Clayton was a native of Virginia, and devoted a long life to the investigation of its botanical riches. He was a private country gentleman, of moderate fortune, and greatly respected by all who knew him. He resided in Gloucester county, about eighteen or twenty miles from the city of Williamsburgh. Clayton's work appears to have been first printed under the following title: "*Flora Virginica: Numeri Plantarum in Virginia Observatarum*, à Johanne Claytono." 8vo, 1739—1743. It was afterward published under this title: Joh. Fred. Gronovii *Flora Virginica, exhibens Plantas quas* J. Claytonus *observavit, collegit et obtulit, &c. Ludg. Bat.* 4to, 1762.

ficial view of the progress of science in America without immediately recognising the extent and the utility of their labours.

The controversy respecting the introduction and support of *bishops* of the episcopal church in the American colonies may be considered as forming an important epocha in the literary history of the country. Every inquiry which induces men of learning and talents to write, and which contributes to form good writers, deserves to be considered as an era in the progress of literature. The controversy above mentioned was certainly useful in both these respects. It called into action latent talents, and by rousing the public attention, and interesting the feelings of some of the most learned men in the country, it gave rise to a number of publications, and no doubt extended the taste for inquiry and reading. In this controversy, the principal writers were Dr. Jonathan Mayhew*, Dr. Charles Chauncey †,

* Dr. Mayhew was pastor of the West Church in Boston. He was a man of distinguished learning and talents. His principal work on this subject was written in 1764.

† Dr. Charles Chauncey was born in Boston in the year 1705; graduated at Harvard college in 1721; was installed pastor of the first church in Boston in 1727; in which station he continued till 1787; when he was removed by death. Dr. Chauncey was descended from the celebrated man of the same name, who, in the days of archbishop Laud, came to New England, became president of Harvard college, and was much celebrated for his erudition, and especially for his acquaintance with oriental literature. His descendant, of whom we are speaking, was also a man of strong mind and extensive learning, and eminently distinguished for his firmness and integrity. Beside several things which he wrote on the American episcopate, he published a treatise on *The Benevolence of the Deity*, 1784; Five *Disserta-*

Mr. East Apthorp*, and Dr. Henry Caner, of Massachusetts; Dr. Samuel Johnson, Dr. Samuel Seabury †, and Mr. Beach‡, of Connecticut; William Livingston §, esquire, and Dr. Myles

tions on the Fall and its Consequences, 1785; and a work entitled *The Salvation of all Men*, 1785.

* The rev. East Apthorp was for a considerable time the rector of an episcopal church in Cambridge, near Boston. He left America in the course of the revolutionary war. Beside what he published in his own country, he has written at least one work since he resided in England, on the deistical controversy, addressed to Mr. Gibbon, in 1778, which is an honourable testimony both of his learning and talents.

† The rev. Samuel Seabury was rector of an episcopal church at New London, in Connecticut, where he held a station among his clerical brethren of high respectability and influence. He was afterward bishop of the episcopal church in that state; and was the first of this order that ever resided in America. Beside smaller tracts, he published, during his life, two volumes of *Sermons*, which show him to have possessed a vigorous and well-informed mind. A supplementary volume of sermons, selected from his manuscripts, was published in 1798, two or three years after his death. See Additional Notes *(M)*.

‡ The rev. Mr. Beach was an episcopal clergyman, and was considered, by those who espoused the cause in support of which he embarked, as a respectable advocate of his church.

§ William Livingston, LL.D., was a member of a family which emigrated from North Britain, and which has, for more than a century, held a respectable and important station in New York. He was born about the year 1723, and graduated at Yale college in 1741. After filling some important offices in New York, his native state, he removed into New Jersey, and was the first governor of that state after the declaration of independence. He continued to fill this office with great honour to himself, and with great usefulness to the state, till the time of his death in 1790. Mr. Livingston wrote a variety of publications beside those which related to the question of an American episcopate, all of which indicate genius, taste, and learning. He was possessed of uncommon strength, discrimi-

Cooper*, of New York; Dr. Chandler of New Jersey; Dr. William Smith of Pennsylvania; and Mr. Boucher of Maryland †. From the middle of the century to the commencement of the revolutionary war this subject engaged much attention and employed many pens in the American colonies ‡.

The establishment of the *Medical School* in Philadelphia § forms an important era in the progress of American science. Before this time, there were no means of completing a regular medical education in the American colonies, and all who wished to obtain such an education were under the necessity of going to Europe for the purpose. Hence, when the plan of a medical school was formed in Philadelphia, it became an object of peculiar importance and interest in the view of all who wished well to the improvement of the country. The plan was formed by Dr. William Shippen and Dr. John Morgan, both natives of Pennsylvania, and began to be executed in the year 1764. In that year Dr. Shippen gave the first course of lectures upon

nation, and vivacity of mind. Proposals have been lately made for publishing his works in several volumes.

* The rev. Myles Cooper was a native of England, and received his education at the university of Oxford. He succeeded Dr. Samuel Johnson as president of *King's* college, which office he held a number of years. He maintained a literary character of considerable eminence.

† See Additional Notes *(N)*.

‡ The rev. Drs. Rodgers, Mason, Laidlie, and Inglis, all of New York, also wrote and published on the subject of the American episcopate, but less formally and extensively than the persons mentioned above.

§ See vol. ii, p. 18.

anatomy that was ever delivered in America. In 1765 Dr. Morgan began to give a course of public instruction on the institutes of medicine. In 1768 Dr. Adam Kuhn, also a native of Pennsylvania, and a favourite pupil of the celebrated Linnæus, commenced a system of lectures on botany and materia medica; and in 1769 Dr. Benjamin Rush, who had just returned from the university of Edinburgh, began to lecture on chemistry. These lectures, which were delivered by the aforesaid gentlemen as professors of the college of Philadelphia, were all of them the first attempts of the kind which had been made upon any regular plan on that side of the Atlantic. The medical school, thus formed, soon became an object of public attention; was resorted to by pupils from different parts of the colonies; has been since gradually increasing; and at present not only holds the first rank among similar institutions in the United States, but will bear a very honourable comparison with some of the best medical seminaries in Europe.

In 1767 an attempt was also made to establish a medical school in *King's college*, in the city of New York*. Professors were appointed by the governors of that institution to teach the various branches of medical science, and a few courses of lectures were given; but the design was not pursued with so much success as in Pennsylvania: it was wholly set aside by the revolutionary war, and did not revive again, to any purpose, until

* See vol. ii, p. 19.

the year 1792, when it was established on a new and better foundation (as was stated in another place), and now holds the second rank among the medical schools of the United States.

The institution of the *Philosophical Society* in Philadelphia also deserves to be noticed among the events favourable to the progress of knowledge in America which took place about this time. Dr. Benjamin Franklin was the father of this institution; but he was ably assisted and supported in his exertions for its establishment by the rev. Drs. Ewing and Smith, by the medical and other professors of the college of Philadelphia, and by a number of the friends to literature and science then residing in that city. The association was organised in 1769; and none, who are acquainted with the progress of science in America, need to be informed that it has been signally useful in exciting a thirst for knowledge in that country; in calling into view scientific acquirements which were before hidden; and in producing a laudable emulation, not only among its members, but also among other friends of learning in the remotest parts of the United States *.

The *Transit of Venus*, as it happened in the

* This institution in 1771 consisted of about two hundred and fifty-five members. Of these, one hundred and fifty-seven were inhabitants of Pennsylvania; ten of Massachusetts; two of Rhode Island; four of Connecticut; eleven of New York; eleven of New Jersey; three of Delaware; five of Maryland; four of Virginia; five of South Carolina; one of Georgia; ten of the West-India Islands; and twenty-five of Europe.

year 1769, gave occasion to the exertion and developement of a considerable portion of that mathematical and astronomical skill which existed in America, but had hitherto been little displayed. This phenomenon attracted much attention in the American colonies; great preparations were made for observing it; and the observations published by several philosophers on that side the Atlantic were considered in Europe as highly honourable to themselves and useful to the cause of science. The talents displayed on this occasion by the rev. Dr. John Ewing*, Dr. David

* The rev. John Ewing, D. D., was born at East Nottingham, in Maryland, June 22, 1732. His classical studies were begun under Dr. Allison, at New London. He afterward went to the college of New Jersey, where he graduated in 1755. In 1759 he received a call to take the pastoral charge of the first presbyterian church in the city of Philadelphia, which he accepted, and continued in this station during the remainder of his life. In 1773 he went to Great Britain and Ireland, on a mission to solicit benefactions for the academy at New Ark, in Delaware, which was before mentioned. During this visit, he formed an acquaintance with some of the most distinguished characters in those countries, and maintained a correspondence with them long afterward. In 1779 he was chosen provost of the university of Pennsylvania, which office, as well as his pastoral charge, he retained till his death. In all the branches of science usually taught in seminaries of learning, more particularly in mathematics, astronomy, and every branch of natural philosophy; in the Latin, Greek, and Hebrew languages; and in logic, metaphysics, and moral philosophy, he was probably one of the most accurate and profound scholars which his country can boast of having reared. He died in 1802, in the seventy-first year of his age, after having held for near half a century a distinguished place among the literati of America. Those who wish to receive more particular information concerning the life, accomplishments, and publications of this great man, will be gratified with the perusal of a *Discourse delivered on Occasion of his Death,* by the rev. John Blair Linn,

Rittenhouse*, the rev. Dr. Smith, Dr. Hugh Williamson, and several others, of Pennsylvania; by Mr. Benjamin West, of Rhode Island; by professor Winthrop†, of Massachusetts; and by some

D. D.; a comprehensive and eloquent eulogium, which does honour to the author, as well as to the object of his panegyric.

* David Rittenhouse, LL. D., F. R. S., was born at Germantown, near Philadelphia, April 8, 1732. He was not favoured with a regular academic education, but he was endued with a genius which rose above all difficulties, and which soon entitled him to a place among the most distinguished ornaments of his country. He early discovered a fondness for mathematical and astronomical inquiries, and was indulged by his parents in learning the trade of a clock and mathematical-instrument maker, in which he was his own instructor. While he resided with his father, in the country, he made himself master of Newton's *Principia*, which he read in the translation of Mr. Mott. Here, likewise, he became acquainted with the science of *fluxions*, of which sublime invention he believed himself for a time to be the author. The first occasion on which his knowledge of mathematics and astronomy was signally displayed, was in observing the *Transit of Venus* in 1769, when he discovered a mind familiar with the most abstruse and complicated investigations. It was in this retirement, also, that he planned and executed his far-famed *Orrery*, in which he represented the revolutions of the heavenly bodies in a manner more complete and comprehensive than any former astronomer. After this, his talents were displayed on various public occasions, and were admired and celebrated, not only throughout his own country, but among the philosophers of Europe. Dr. Rittenhouse, on account of that modesty for which he was always remarkable, published but little. An *Oration* delivered before the *Philosophical Society* in 1775, and a few Memoirs on Mathematical and Astronomical subjects, contained in the first three volumes of the *Transactions* of that body, form the whole list of his publications. He was loaded with honours, both by the state and by literary and scientific institutions. He was chosen president of the Philosophical Society in 1791; and was annually reelected to this office till his death in 1796. See Dr. Rush's *Eulogium*.

† John Winthrop, LL. D., F. R. S., was born in Boston, in 1714.

other American astronomers, are too well known to render any particular details on the subject necessary here.

In 1769 a college was founded in the town of Hanover, in New Hampshire. Of this institution the rev. Dr. Eleazar Wheelock was the founder; and the earl of Dartmouth being one of its most liberal benefactors, it was called after him *Dartmouth college*. Dr. Wheelock had been, for some years previous to that above mentioned, the conductor of a charity-school, at Lebanon, in Connecticut, which was principally intended for the instruction of Indian youth*. About that time,

and educated at Harvard college, where he received his first degree in 1732. In 1738 he was appointed Hollis professor of mathematics and natural philosophy in the college in which he was educated. He immediately entered on the duties of this office, which he executed with great ability and reputation till his death in 1779. He was a man of general and profound learning; but particularly so in the branches of science which he undertook to teach. His work *De Cometis* does him great honour. That he was known and respected among the philosophers of Europe, is evident from his being elected a member of the *Royal Society;* an honour which had been conferred on a native of Massachusetts only in one instance before, viz. in the case of the celebrated Cotton Mather.—*MS. Letter of the Rev. Dr. Eliot to the author.*

* The first charity-school erected in America for the instruction of the Indians was at Stockbridge, in Massachusetts, by the rev. John Sergeant, between the years 1740 and 1750. He had scarcely gotten his plan into operation, before he was removed by death. The design was revived by the rev. Eleazar Wheelock, who solicited and obtained donations for the purpose, both in Europe and America; and opened a school at Lebanon, which was called after the name of Mr. Joshua Moor, who was the largest benefactor to the institution. When *Dartmouth college* was founded at Hanover, this school was removed thither, where it has ever since continued, connected with the college, but di-

it being found that the school, on its original narrow establishment, was not sufficient to answer the purposes which its friends had in view, a royal charter was obtained, constituting a college, and naming Dr. Wheelock as the first president, with the privilege of nominating his successor in his last will. The charity-school, together with the newly-constituted college, was removed to Hanover, in New Hampshire, where both have been ever since fixed: and though neither of them flourished during the revolutionary war, which soon succeeded, yet, since the restoration of peace, they have grown considerably; the college, in particular, having become, at the close of the century, a large, respectable, and thriving seminary *.

About this time we may date the establishment of a college at Providence, in Rhode Island. This institution was erected by certain persons of influence of the baptist denomination; and among these perhaps no individual so well deserves to be considered as its founder, as the rev. Dr. Manning †, the first president. The charter for this

stinct as to its property, design, and government. Dr. E. Wheelock died in 1779, in the sixty seventh year of his age, and was succeeded by his son, John Wheelock, LL. D., who has ever since presided over the institution.

* Among the benefactors to this institution, beside his majesty George III, lord Dartmouth, the countess of Huntingdon, and several other persons of eminence in Europe, we find the names of Dr. Franklin, John Adams, esq., late president of the United States, John Jay, esq., late chief justice of the United States, and governor of the state of New York, and the hon. John Phillips, of Exeter, in New Hampshire.

† The rev. Dr. Manning was born in New Jersey in the year 1738. He was educated at Nassau Hall, where he was admitted to the first honours of the college in 1762. In 1765 he removed,

college was given in 1764. It was open for the reception of students the next year at Warren. The first commencement was held in 1769; and in 1770 it was removed to the town of Providence, where a spacious building was erected for the reception of the students, and which is considered as the permanent seat of the institution. The charter of this college makes it necessary, that the president should be a baptist; and indeed the institution has always been under the immediate government of this denomination of Christians.

Between the years 1765 and 1772 a revolution took place in the taste of the students in Yale college. About this time the study of the mathematics and of the ancient languages began to decline, and that of *belles lettres* to be an object of more attention than before. This revolution was chiefly produced by the rev. Dr. Dwight, who has since held so conspicuous a place among the poets and divines of America; by Mr. John Trumbull, who also stands, in the first rank of its native poets; by the rev. Mr. Howe, afterward a respectable clergyman, and by some others, their contemporaries. These gentlemen, being instructors in the college at this time; and having imbibed a more predominant taste for polite literature than had been common among their predecessors; encouraged among the students, both by precept

to Warren, in Rhode Island, and there took charge of the college, to the presidency of which he had been elected. In 1770 he removed, with that institution, to Providence, and was soon afterward chosen pastor of the baptist church in that town. In this situation he remained till his death, which took place in 1791.

and example, a new degree of attention to the best writers in their own language, and to the graces of composition. The change, however, was carried to a greater length than its enlightened authors intended or approved. Designing only to raise the study of polite literature to its proper station, it soon began to usurp the place of the more abstruse sciences, and of the ancient languages; which, though still studied with considerable care, have perhaps never since fully regained their former station in that seminary.

The arrival of Dr. Witherspoon* in America, from North Britain, is entitled to notice among the events which contributed to the advancement of literature and science in that country. It is not to be supposed, that a mind so vigorous, enlight-

* Dr. John Witherspoon was born at Yester, near Edinburgh, February 5, 1722. After being settled in the Gospel ministry, for upwards of twenty years, in North Britain, he came to America in 1768, and continued to preside over the college of New Jersey from that time till his death in 1794. Whether we consider Dr. Witherspoon as a divine, a statesman, or the head of a literary institution, his talents and usefulness present themselves in a very conspicuous light. Scarcely any man of the age had a more vigorous mind, or a more sound practical understanding; and though many have had more learning, yet a mass of information better selected, or more thoroughly digested, than that which he possessed, is rarely to be found.—See an excellent *Sermon* preached on the occasion of his death by the rev. Dr. Rodgers, of New York, which contains a comprehensive and ably drawn character of the deceased.—Though the largest and most valuable part of Dr. Witherspoon's writings was published before he left Britain, yet he wrote and published much after his removal to America. Mr. W. W. Woodward, of Philadelphia, has lately rendered important service to the cause of religion and literature, by collecting the whole of his works, and presenting two editions of them to the American public.

ened, and active as his, and placed in a conspicuous station, could fail of contributing to the literary advancement of any community in which he resided. Invited to undertake the office of president of the college of New Jersey, this great man arrived at Princeton in the year 1768, and immediately entered on the duties of his new station. He produced an important revolution in the system of education adopted in this seminary. He extended the study of mathematical science, and introduced into the course of instruction in natural philosophy many improvements, which had been little known in most of the American colleges, and particularly in that institution. He placed the plan of instruction in moral philosophy on a new and improved basis; and was, it is believed, the first man who taught in America the substance of those doctrines of the philosophy of the human mind, which Dr. Reid afterward developed with so much success. And, finally, under his presidency more attention began to be paid than before to the principles of taste and composition, and to the study of elegant literature.

About the same time the study of the physical sciences received new encouragement in Virginia. Hitherto comparatively small attention had been paid to natural philosophy in the college of William and Mary; or not more than reading some common treatise on this subject, with a very inadequate degree of attention or understanding. In 1768 a valuable, though not very extensive philosophical apparatus was imported from London, for the use of that institution; and in 1774 the first regular course of lectures on the subject was

delivered by the rev. Dr. Madison, since president of the college, and bishop of the protestant episcopal church in Virginia, whose services in the promotion of literature and science in that state are generally known. Since that time, natural philosophy has been almost constantly enlarging the number of its votaries, and has been cultivated with greater assiduity.

The attention which was paid to this college by lord Botetourt, one of the last governors of Virginia while a British colony, deserves to be noticed here, as honourable to himself, and as useful to the institution. His exertions to promote its interests were zealous and unremitted*. Among other things, he instituted an annual contest among the students, for two elegant gold medals of the value of five guineas; one for the best Latin oration on a given subject; the other for superiority in mathematical science. And though the useful effects of his exertions were rendered in a great measure abortive by the scenes of war and confusion which soon followed, yet they were by no means without their value.

About the year 1774 another college was founded in Virginia. It was for some time nothing more than a respectable academy; but after a few years assumed the name, and became invested with the powers of a college. The rev. Samuel

* Lord Botetourt made a point, for a long time, of sanctioning, by his presence, morning and evening prayers in the college. No company, no avocation, prevented his attendance on this service. This nobleman was extremely fond of literary characters. No one of this class, who had the least claim to respect, was ever presented to him whom he did not foster and encourage.

S. Smith, now president of the college of New Jersey, and whose literary eminence is well known, may be considered as the founder of this institution. It is called *Hampden Sidney college*, and has been useful in training up a number of good scholars; but is not now considered as in a very flourishing situation.

But among the various remarkable periods in the progress of American literature, there are few more worthy of notice than the American revolution; a grand struggle, which both awakened and produced talents; and which, by giving birth to many publications, served to impart new vigour to minds little distinguished before, and to improve the public taste. Hence it is a fact, that the style in which the petitions and remonstrances of the American congress at that time, and other political writings of the day, were drawn up, excited surprise in Europe, and gave new elevation to the literary character of the country.

Among those who distinguished themselves at this period by their publications relating to the great political contest which divided America, we may enumerate James Otis, Josiah Quincy, Samuel Adams, John Adams, and Thomas Hutchinson, of Massachusetts; William Livingston, and John Witherspoon, of New Jersey; John Dickinson*, and Joseph Gallo-

* John Dickinson, esq., who is a native of the state of Delaware, and at present resides in that state, received a considerable part of his education in Great Britain, from which he had returned but a few years when the controversy between the colonies and the mother country commenced. He wrote and published much on this controversy at different periods; but, perhaps, among the

way*, of Pennsylvania; Daniel Dulaney†, of Maryland; Richard Bland, Arthur Lee, Robert Carter Nicholas, and Thomas Jefferson, of Virginia; and William Henry Drayton‡, of South

numerous and respectable publications which appeared at this time, the *Farmer's Letters*, for dignity, eloquence, learning, and permanent reputation, ought to be considered as holding the first place. The *eclat* with which this work was received, the useful effects which it produced, and the public acknowledgements and honours which have been since heaped upon the author, are too generally known to render it either necessary or proper to dwell on them here. A handsome edition of the *Works* of this illustrious American, in two volumes octavo, issued in 1801 from the press of Messrs. *Bonsal* and *Niles*, in Wilmington.

* Joseph Galloway, esq., is a native of the state of Delaware. He received a liberal education; and, among other public honours conferred upon him, was a delegate to the American congress from Pennsylvania, until the declaration of independence, when he thought it his duty to oppose the measures adopted by that body, and to attach himself to the friends of the British government. He was a respectable writer in favour of the latter; and, at an early period of the revolutionary war, went to England, where he still resides. Mr. Galloway has lately published a work on the subject of the *Prophecies*, which is spoken of with great respect, as indicating talents, learning, and piety. Since this note was written an account of his death has reached the United States.

† Daniel Dulaney, esq., was an eminent counsellor, who resided at Annapolis. He was considered as one of the most learned and accomplished men in his profession, that America ever produced. He died at an early stage of the revolutionary war.

‡ William Henry Drayton, esq., a native of South Carolina, was a political writer of considerable eminence. In 1774 he wrote a pamphlet, addressed to the American congress, under the signature of *A Freeman*, in which he stated the grievances of America, and drew a bill of American rights. Several other publications appeared from his pen, explaining the injured rights of his country, and encouraging his fellow citizens to vindicate them. He also wrote a *History of the American Revolution*,

Carolina*. Beside these, a number of writers of smaller name embarked in the same cause, and contributed to the mass of inquiries and publications which the period produced. And though the distresses of the times served to derange and almost to destroy some important literary institutions; yet, during this period, seeds were sown which were destined soon afterward to spring up and to bring forth fruit highly honourable to that country.

The revolutionary war was no sooner terminated by the peace of 1783, than the friends of literature began to feel more than ever the importance of encouraging institutions for diffusing useful knowledge among the people. Indeed, before the din of arms ceased to be heard, plans began to be formed, and in some instances to be executed, for the promotion of this object. The inhabitants of the American States now not only felt independent in a political view, but they also began to cherish the wish for greater literary independence than they had heretofore enjoyed. The zeal and enterprise which had been directed

brought down to the year 1779, in three large volumes, which he intended to correct and publish, but was prevented by death. He died in Philadelphia in 1779, while attending his duty in congress, in the thirty seventh year of his age.

* The author regrets, that it is not in his power to give a more complete catalogue of the writers on the American controversy. Many well written pamphlets on both sides of this question were published anonymously. This was especially the case with those who wrote in favour of the British claims; so that out of the large number who belong to the latter class, only lieutenant-governor Hutchinson and Mr. Galloway are sufficiently known to be particularly mentioned.

against the common enemy were now turned towards domestic improvement.

In 1780 an act passed the legislature of Massachusetts for establishing the *American Academy of Arts and Sciences**. Its design was to promote every species of liberal knowledge that might tend to "advance the interest, honour, and happiness, of a free, independent, and virtuous, people." This institution soon rose into importance; and, from the character of its members, and of the publications which it has made, may be considered as among the most respectable and useful associations in the United States.

About this time three gentlemen of the name of Phillips†, one residing at Andover, in Massachu-

* The hon. James Bowdoin, afterward governor of the commonwealth, and a man of taste and science, was the first president of the American academy. He was also a liberal benefactor to the institution, and continued to preside over it with honour until his death, in 1790. Another conspicuous benefactor to this association was Josiah Quincy, esq., a learned and eloquent counsellor, a distinguished patriot, and an able political writer. To these may be added the hon. John Adams, late president of the United States, and now president of the academy, and Dr. Franklin, who also made important donations to the institution. But the greater part of the funds of the academy consist of five thousand dollars, presented to it by their illustrious countryman count Rumford, who in 1796 made a donation of the above sum, the interest of which is to be applied and given once every second year, as a premium to the author of the most important discovery, or useful improvement, on *Light* or on *Heat*, which shall be made known to the public in any part of the continent of America, or in any of the American islands, during the two preceding years.

† The family of Phillips, in Massachusetts and New Hampshire, has been long distinguished for its great wealth, and also for its love of religion and literature. A complete history of the

setts, another at Exeter, in New Hampshire, and a third in Boston, exercised a degree of munificence, which is equally rare in America, and honourable to their generosity and love of literature. In 1778 the honourable Samuel Phillips, of Andover, founded and liberally endowed an academy in the town in which he resided. In this laudable undertaking he was aided by his brothers, the honourable John Phillips, LL.D., of Exeter, and William Phillips, esq., of Boston. Not long afterward the former of these brothers founded and very richly endowed an academy at Exeter, the place of his residence. Both these academies are called by the name of the family to whom they owe their existence; both continue to grow in respectability and usefulness, and are likely long to remain monuments of the noble and distinguished public spirit which gave them birth*.

Immediately on the return of peace, a college was established in the town of Carlisle, in Pennsylvania. This institution received the name of *Dickinson college*, being called after the celebrated statesman and political writer, John Dickinson, esq., who was its most liberal benefactor. Doctor Rush also, and several other gentlemen of distinction in Pennsylvania, were among the most active friends and promoters of this establishment. Soon

munificence exercised towards public institutions at different times by the members of this family would probably furnish an amount of benefactions seldom equalled in America.

* In furnishing instances of individual liberality to public institutions, it is believed that Massachusetts exceeds all the other states.

after the charter for this college was obtained, the rev. Dr. Charles Nisbet, of Montrose, in Scotland, was called to be its president. He accepted the invitation, and in the year 1784 arrived in America. It is scarcely necessary to say, that the eminent talents, and profound and general learning of this gentleman, were considered as an important acquisition to the literary interests of that country, and that he soon contributed to raise the character of the institution. From this period to the close of the century he continued to preside over it with usefulness and honour.

Seminaries of learning began now to multiply rapidly. From the peace of 1783 to the close of 1800, there were *seventeen* colleges founded in the United States, *viz.* two in Massachusetts, one in Vermont, one in New York, two in Pennsylvania, four in Maryland, one in North Carolina, three in South Carolina, one in Georgia, one in Kentucky, and one in Tennessee. Beside these, academies during this period were multiplied almost without number.* Indeed, it may be questioned whether seminaries of the higher order have not been made so numerous in many parts of the country, as to produce effects directly the reverse of what were intended. It is as possible to have too many *colleges*, as it is to have too many *laws*, or too many *books*.

The institution of these academies was soon followed by the organisation of a new medical school attached to the university of Cambridge, in Massachusetts. This event took place in 1783, when the first professors were appointed, and the first system of medical lectures delivered in that

commonwealth. The governors of the university were enabled to effect this establishment by means of several generous donations made for this particular purpose by Dr. Ezekiel Hersey, an enlightened and opulent physician of Hingham; by his widow, a few years afterward; by his brother, Dr. Abner Hersey, of Barnstable; by Dr. John Cumming, of Concord; and by William Erving, esq., of Boston *. The several professorships bear the names of their respective founders; and while they exhibit monuments of laudable beneficence, have proved highly useful in the diffusion of science †.

In 1783 Mr. Noah Webster, of Connecticut, published the first part of his *Grammatical Institute of the English Language* ‡. This was soon

* Dr. Ezekiel Hersey gave 1000*l.*, Massachusetts currency, to be applied to the support of a professor of *anatomy* and *surgery*; his widow a like sum, for the same purpose; his brother, Dr. A. Hersey, 500*l.*, for the encouragement and support of medical instruction; Dr. Cumming, a like sum, to be applied to the same object; and William Erving, esq., 1000*l.*, to be devoted to the support of a professorship of *chemistry* and *materia medica*. These several sums, amounting to between 13000 and 14000 dollars, are funded, and the interest devoted to the objects directed by the donors.

† The author takes pleasure in acknowledging in this place his obligations to his friend the rev. Dr. Eliot, of Boston, for a large portion of the information he is able to give respecting the literature of Massachusetts. From a mind so well stored on the subject of American antiquities, he might have drawn much more ample materials, had application been made early enough to admit of a leisurely attention to the object.

‡ This work was begun in the autumn of 1782, and published in the spring of 1783, at Hartford. The success which has attended it, notwithstanding so many other spelling books and grammars have solicited public favour since it appeared, at once

followed by two other parts of the same work; by *Dissertations on the English Language*, and by several other publications from the same pen. The influence of this gentleman in promoting a taste for philological inquiries and good writing among his countrymen; the general introduction of his *Institute* into the schools of America; and the extensive utility of his learned labours, are well known, and are worthy of particular notice in tracing the literary history of that country.

The establishment of the federal government, in 1789, may be considered as the last grand epocha in the progress of knowledge in America. From this period public tranquillity and confidence began to rest on a foundation more solid than before; wealth flowed in on every side; the extended intercourse with Europe, the great seat of civilisation, refinement, and literature, rendered the United States every day more familiar with transatlantic productions and improvements; and a sense of national dignity and independence becoming gradually more strong and general in them, all conspired to furnish the means, and to excite an ambition for enriching their own country with the treasures of knowledge.

From this time till the end of the century, literary institutions of various kinds were multiplied with astonishing rapidity in the United States. Beside colleges, academies, and subordinate schools, scientific associations were formed; li-

does honour to the author, and shows that education is by no means neglected in America. At the beginning of the year 1801, more than *one million and a half* of copies of this work had been sold.

braries began to be established in the most remote parts of the country; printing presses and bookstores appeared in great numbers where they were never before known; newspapers became numerous to a degree beyond all precedent; and the rewards of literary labour, though still too small, were considerably augmented. The establishment of the *Historical Society of Massachusetts*, in 1791; of the *Medical Schools* of New Hampshire and Kentucky, in 1798; of the *Connecticut Academy of Arts and Sciences*, in 1799; and of the numerous *Medical* and *Agricultural Societies* in almost every part of the United States; within a few years past, deserve particular notice, and form interesting items in the annals of their literary progress.

At the beginning of the century there were *two* colleges in the American colonies. At the close of it there were *twenty seven*; from which it may be estimated that *four hundred* students are annually sent forth, with academic honours*. At the beginning of the century the number of academies was small; and even these were on a comparatively narrow plan, and were ill attended by students; but at the close of it the number of these institutions had become so great, in almost every state in the union, especially in the eastern and middle states, that it would be difficult to form a tolerably correct estimate of their number. At the commencement of the century there were but *two* public *libraries* in the American colonies: these belonged to Harvard college, and

* See Additional Notes *(O)*.

to the province of South Carolina, and were very small*. Since that period the number has increased to *many hundreds,* and is every year becoming still greater †. Private libraries have also become numerous and extensive in a still more remarkable degree.

At the commencement of the period under review, there were but *three* or *four printers* in the American colonies; and these carried on their business upon a very small scale, and in a very coarse, inelegant manner. But at present the number of printers in the United States may be considered as nearly *three hundred;* and many of these perform their work with a neatness and elegance which are rarely exceeded in Europe. At that time the printing an original American work, even a small pamphlet, was a rare occurrence, and seriously weighed, as an important undertaking; while the reprinting of foreign works was seldom attempted. But now at least *one hundred* American works, some of which are large and respectable, annually issue from their presses; and the republication of foreign books is carried on in almost every part of the country, and particularly in the capital towns, with a degree of enter-

* In the seventeenth century, some of the congregational churches in Massachusetts began to form *church libraries.* These were considerably numerous and useful; and some of them remain till the present day. The use of these libraries, however, was chiefly confined to the particular congregations whose property they were.

† The number of incorporated *libraries* in Massachusetts is said to be about *one hundred.* The number in the other eastern states is not known; but institutions of this kind are far more numerous in New England than in any other part of America.

prise, and to an extent which would not disgrace some of the most cultivated parts of the European world.

Before the revolutionary war the *booksellers* in the American colonies were few, and carried on their business on a contracted plan. Since that time their number has increased more than *fifty fold;* and the extent of their annual sales, perhaps, in a still greater proportion *. Thirty years ago, he who undertook to dispose of a moderately large edition, even of a spelling-book, considered himself as engaged in a hazardous enterprise. But in 1790 a single bookseller thought himself warranted in attempting an American edition of the *Encyclopædia Britannica*, in eighteen quarto volumes, and completely succeeded in making it a profitable undertaking †. And since the last-mentioned year, a number of works extending to many volumes have been carried through American presses, with great ease and readiness.

The first edition of the *Bible* ever printed in America was that by the rev. John Eliot, the ce-

* In 1802 the German plan of disposing of books by means of *literary fairs* was adopted in the United States. The first book-fair was held in New York; and it is proposed, in future, to hold them statedly in that city. It is believed that Mr. Mathew Carey, a well informed and enterprising bookseller of Philadelphia, was one of the first who suggested the propriety and utility of the undertaking, which has so far happily succeeded, and bids fair to be highly useful, both to the book trade and to the cause of literature.

† The person here alluded to is Mr. Thomas Dobson of Philadelphia, an intelligent and respectable bookseller, who has probably contributed as much as any individual in his profession to the promotion of American literature.

lebrated *apostle* of the Indians, in the language of the *Naticks*. This monument of pious labour was first printed at Cambridge in Massachusetts, in 1664, and a second edition at the same place sixteen years afterward. From this period till the beginning of the revolutionary war, at so low an ebb was the book trade in America, that we hear of no attempt to print an edition of the Bible on that side of the Atlantic. In 1776 Christopher Sower, of Germantown near Philadelphia, printed a *quarto* edition of the Bible in the German language. He engaged in this work at his own risk, executed it with great elegance, and had the honour of printing the first quarto Bible that ever issued from an American press. About the year 1781 Mr. Robert Aitken, of Philadelphia, undertook to present the American public with a duodecimo edition of the Sacred Scriptures. This laudable undertaking was executed, but with great difficulty, arising from the peculiar situation of the country at that time *. But within the last eighteen or twenty years, undertakings of this kind have become so numerous and so familiar, that the importation of Bibles for the supply of the American market, though not entirely, has in a great measure ceased. The first *quarto* edition of the English Bible printed in the United States

* Immediately after the publication of this edition of the Bible, peace took place; when it was soon found that Bibles could be imported from Great Britain cheaper than it was possible to print them in America. Mr. Aitken, therefore, not obtaining a ready sale for his edition, which had been carried on with great difficulty, was nearly ruined by the undertaking.

was in the year 1791, by Mr. Isaac Collins, then residing at Trenton in New Jersey. In a few months afterward another quarto edition was published by Mr. Isaiah Thomas, of Worcester in Massachusetts; who, in the same year, laid before the public the first *folio* edition of the Holy Scriptures that was printed in the United States. Since that time several folio editions of the Bible, and a number of quarto editions, have been printed in America, and begin to be considered by the printers and booksellers of that country as small and easy undertakings.

Those kinds of literary productions which have been most common and most successful in the United States are *theological* and *political* works, and those intended for the use of *schools*. For the *first* we are indebted to that seriousness and taste for religious inquiry which prevails in New England, and in a considerable, though less degree, in the middle and southern states. The almost universal taste for the *second* class of books we owe to the nature of our government, which is eminently calculated to foster, to bring forward, and to display political talents, and to excite the attention of every class of citizens to political inquiries. And the general encouragement given to productions of the last mentioned kind arises from that disposition to attend to the education of children, which has long characterised the eastern states, and which, during the last ten years of the century under review, rapidly extended itself through every part of the union.

The *School establishments* of New England,

especially in the states of Massachusetts and Connecticut *, though they took their rise in the seventeenth century, yet underwent such modifications, and received so many improvements in the eighteenth, that it would be improper to pass them without notice in this retrospect †. These establishments have been carried to such a degree of perfection, that in New England, and particularly in the two states above mentioned, scarcely an individual can be found, of either sex, who has not been instructed in reading, writing, and arithmetic, and who does not habitually read more or less in newspapers, and a few of the best books on religion and morality. Attempts have been made in some of the middle and southern states to adopt similar plans of general education; but though much has been done, in several of these states, towards rendering the elements of English literature a boon within the reach of all classes in the community, yet the habits of the people not being so favourable to the diffusion of knowledge, and their cha-

* The *School* system of Connecticut is generally considered the most perfect in the United States. The parish schools in that state amount to at least *twelve hundred*, containing on an average *forty scholars* each, or *forty-eight thousand* in the whole. Next to that of Connecticut, in point of excellence, we may place the school system of Massachusetts. The number of schools in that state is not known to the author. He presumes, however, that it cannot be less than in Connecticut.

† The author takes pleasure in acknowledging his obligation to Noah Webster, jun., esq., for some valuable information respecting the literature of Connecticut during the eighteenth century; and especially for a more satisfactory account of the school establishments in that state than he had before received.

racters and manners being less homogeneous, they have made less progress towards maturing and perfecting their school establishments than the eastern states.

It may not be improper to take notice of some of those branches of science and literature which have been most cultivated in the United States; and also of the names of those who have been principally distinguished by their attention to these objects.

In *Mathematics, Astronomy*, and the more abstruse departments of *Mechanical Philosophy*, America has been distinguished to a degree which, all things considered, is highly honourable to its genius and diligence. The names of Greenwood, Winthrop, Bowdoin *, Willard, Fobes, and others of Massachusetts; of West of Rhode Island; of Clap, and Mansfield, of Connecticut; of William Alexander, commonly called lord Stirling †, of New Jersey; of Godfrey, Ritten-

* James Bowdoin, LL.D. F.R.S., was born at Boston, Massachusetts, August 18, 1727. His father was a native of France, and fled among the persecuted protestants of that country, first to Ireland, and afterwards to New England, where he arrived in the year 1688. His son James, the object of our present attention, was educated at Harvard college, where he received his first degree in 1745. After filling some important stations in public life, he was chosen governor of Massachusetts in 1785 and 1786. He died in 1790, greatly and generally respected. Those who have perused the *Memoirs of the American Academy of Arts and Sciences* will recollect the several papers contained in them, which manifest no common taste and talents in astronomical inquiries.

† William Alexander, esq., was a native of the city of New York, but spent a considerable part of his life in New Jersey. He was considered, by many, as the rightful heir to the title and

house, Ewing, Williamson, Patterson, and Ellicott, of Pennsylvania; and of Madison, Page, and several more of Virginia, are so well and so respectably known, that it is unnecessary to enlarge on their merits *. Beside the learning and talents of these native citizens, lieutenant-governor Colden, mentioned in several former chapters, and professor Minto †, both of North Britain, de-

estate of an *earldom* in Scotland, of which country his father was a native; and although when he went to North Britain in pursuit of this inheritance, he failed of obtaining an acknowledgment of his claim by government; yet, among his friends and acquaintances, he received, by courtesy, the title of lord Stirling. He discovered an early fondness for the study of mathematics and astronomy, and attained great eminence in these sciences.

* The author, in this list, has only introduced the names of such mathematicians, astronomers, &c., as, by means of some publication or other display of their learning and talents, appeared to him to have made themselves more than usually known. He is sensible that a number of the professors of these branches of knowledge in the colleges, both native citizens and foreigners, stand high in the estimation of all who know them; and though not brought so immediately before the public, yet possess perhaps a degree of erudition and skill little if at all inferior to those possessed by the persons above named.

† Walter Minto, LL. D., was a native of Scotland, and received a liberal education in that country. Early in life he visited Italy, and spent a number of years at Pisa, pursuing, with great diligence, his mathematical and astronomical studies. Soon after the close of the revolutionary war, he came to America, and about the year 1787 was appointed professor of *mathematics and natural philosophy in the college of New Jersey.* In this situation he was respected and useful. He was beyond all doubt a great mathematician and astronomer, as appears from his *Researches into some Parts of the Theory of the Planets*, &c., 8vo, London, 1783; and also from his *Oration on the Progress and Importance of the mathematical Sciences*, &c., 1788. He died about the year 1796.

serve, among many others, to be mentioned with honour, as having contributed to the cultivation of mathematical and astronomical science in America.

Chemical Philosophy has also been cultivated in the United States with a zeal and success worthy of respectful notice. The first course of instruction in chemistry ever attempted in America was in the year 1769, by Dr. Benjamin Rush, about that time appointed professor of this branch of science in the college of Philadelphia. To Dr. Samuel L. Mitchill, of New York, the honour is due of having first publicly taught, in an American seminary, the system of chemistry digested and published by Lavoisier and his associates. This was in a course of lectures delivered by him in Columbia college, in the year 1792, as a professor in that institution: and his various publications and numerous experiments on the subject, from that time to the present, have doubtless contributed to extend the taste for chemical inquiries. Dr. Mitchill was soon followed by Dr. Woodhouse of Philadelphia, Dr. Maclean of Princeton, Dr. Dexter of Cambridge, and, in a few years afterward, by several others, in different parts of the continent. This department of physical science is much more studied in the middle and southern states than in New England.

The arrival of Dr. Priestley in the United States gave a spring to the study of chemistry on that side of the Atlantic. This celebrated philosopher possessed an ardour and activity of mind, which were eminently fitted to influence those with whom he had any intercourse, and to draw the

public attention to the objects which he pursued. And although to the last he adhered to a system of doctrines which a great majority of chemists consider as erroneous, yet his numerous experiments and publications on the subject after he resided in the United States, have contributed to excite a spirit of inquiry, and to improve the public taste for chemical philosophy.

The votaries of *Natural History* in the United States, though not numerous, are respectable, and have rendered important services to this branch of science. Beside those of this class whose names were mentioned in preceding pages, a few others are entitled to particular notice. The rev. Dr. Cutler, Mr. Peck, and Dr. Waterhouse, of Massachusetts; Dr. Mitchill of New York; the rev. Dr. Muhlenberg, and Mr. Marshall, of Pennsylvania; and Mr. Walter * of South Carolina, are all advantageously known by their publications on different branches of natural history. But, among the natural historians now living in the United States, professor Barton of Philadelphia undoubtedly holds the first rank. His various works evince a closeness of observation, an accuracy of inquiry, an extent of learning, and a vigour and comprehensiveness of

* Thomas Walter was a native of England, a man of liberal education, and much devoted to botany. He settled in South Carolina, a few miles from the city of Charleston, where he resided a number of years as a planter, and where he died towards the close of the eighteenth century. He published his *Flora Caroliniana* in 1788. He introduced a new species of grass, from which much was expected; but it did not stand the test of time.

mind, which are equally honourable to their possessor, and to his country. Should his life and health be spared, he bids fair to attain a place among the most accomplished scientific naturalists of the nineteenth century.

In the science of *Medicine*, America has presented specimens of learning and talents of the most honourable kind. It may be questioned whether this science is cultivated more zealously or more successfully in any part of the world than in America; or whether any medical school in Europe furnishes, on the whole, greater advantages to the student than that of Philadelphia *. The spring which was given to the study of medicine within the last ten years of the eighteenth century, in the United States, deserves to be noticed as very remarkable. This was effected, not only by the writings of several distinguished physicians of America, among whom Dr. Rush holds the first place, and to whom medical science in that country owes a large debt of gratitude; but also, and perhaps more especially, by the unprecedented frequency with which it has been visited, during this period, by *pestilential diseases*, which have roused the attention and called forth the talents of its physicians,

* It is not contended, that the advantages to be enjoyed in the medical school at Philadelphia are equal to those furnished by the clinical lectures and practice, in the numerous and large hospitals of London, and the still more numerous courses of lectures, delivered by private instructors in that city. It is only meant to be asserted, that no regular medical school, connected with any university of Europe, offers to the student better means of medical instruction than those which may be enjoyed in Philadelphia.

and led to investigations, to an interchange of opinions, and to a publication of the results of their inquiries, which were never so general before.

In the *Mechanic Arts*, so far as respects the ingenuity of individuals, and the important service rendered by numerous inventions and improvements, America yields to no nation. Perhaps, considering the amount of its population, and the peculiar circumstances of its people, it has furnished even a greater number of these inventions and improvements than its just proportion. On this subject, as it would be difficult to enter into details without exceeding all convenient limits; so there can be no doubt that a number of instances, abundantly sufficient to support the assertion here made, will readily occur to every reader. The *Quadrant*, by Godfrey; the *Orrery*, by Rittenhouse; the machinery for manufacturing *Cards*, by Whittemore; and that for manufacturing *Fire-arms*, by Whitney; form but a very small number of the large list that might be presented.

Of talents in the *Fine Arts*, America has been less productive. But we have satisfactory evidence that this arises not so much from the want of native genius, as from the want of cultivation and encouragement of the genius it possesses. The names of West, Trumbull, Copley, and Stuart, are more than sufficient to rescue their country from any imputations of deficiency on this head.

When we pass on to *Theology*, the noblest and most important of all sciences, it will be found,

that, on this subject, America may claim high distinction. To omit many names of less note, the theological writings of president Edwards, and of the rev. Dr. Hopkins, have excited much attention in the religious world. The former, in particular, deserves perhaps to be considered as one of the greatest divines that ever lived. Beside many tracts of high reputation, on detached points of theology, and which have been well received, not only in America, but also in Europe; a number of volumes of *Sermons* have been produced by their countrymen, which show, that the eloquence of the pulpit is by no means neglected. The first volume of sermons ever published in America, that had any just claim to correctness and elegance of style, was printed in Boston, in the year 1727, by Ebenezer Pemberton, pastor of a church in that town. Since that time, the collections of sermons, by president Davies *, Dr.

* The rev. Samuel Davies was born in the county of Newcastle, in the state of Delaware, November 3, 1724. He received the greater part of his academic and theological education under the care of the rev. Mr. Samuel Blair, of Fog's Manor, in Pennsylvania, and was licensed to preach the Gospel, by the presbytery of Newcastle, about the year 1745. Soon after this event, he travelled into Virginia, where he settled in the ministry, in Hanover county, and remained there in an extensive sphere of usefulness, and highly respected, for a number of years. In 1753 he was chosen by the synod of New York, at the solicitation of the trustees of New Jersey college, to accompany the rev. Gilbert Tennent on a mission to Great Britain and Ireland, to solicit benefactions for that college. In 1759 he was elected to succeed Mr. Edwards in the presidency of the institution. In this station he remained but eighteen months, being removed by death in January 1761, in the thirty-seventh year of his age. The genius, taste, learning, and eminent piety of president Davies, have been so much

Lathrop, Dr. Seabury, president Smith, Dr. Linn, Dr. Strong, Dr. Clarke, Dr. Emmons, and several others, of different kinds and degrees of merit, have received much public approbation*.

In the *Philosophy of the Human Mind* the eighteenth century did not produce a greater effort of genius, than the *Treatise on the Will*, by president Edwards. A work of his son, the late Dr. Jonathan Edwards, president of Union college, on the same subject, is also an honourable monument of talents and learning. And perhaps it may be asserted, that within the last thirty years a fondness for metaphysical subtleties and refined speculations has remarkably characterised the theological publications, particularly in the eastern states of America.

In *Classic Literature*, the United States have given birth to little that can be deemed remarkable. The first translation of a classic author ever made and published in America was by James Logan, several times before mentioned, who, in 1744, published a version of Cicero's treatise *De Senectute*, with explanatory notes. Since that time several works of a similar kind

celebrated, that it is unnecessary to dwell on them here. His *Sermons*, in three volumes, were first published in 1765. Their uncommon merit is well known. They have undergone a number of impressions.

* Beside the more formal volumes of sermons above mentioned, it would be easy to select smaller collections of discourses on particular subjects, which do honour to the genius, learning, and taste of their respective authors; and the single sermons of merit are much more numerous; but it is obviously impossible to indulge such minute details, consistently with the requisite brevity.

have been executed in the United States. Among many others who might be mentioned as distinguished for their classic learning and taste, it would be improper to omit the name of Charles Thomson, esq. *, late secretary of the American congress. The erudition and skill of this gentleman, especially in Greek literature, do honour to his country. He has completed a translation of the *Septuagint* version of the Old Testament Scriptures, and of the original of the New Testament, which the friends of biblical literature in America hope soon to see published; and which, in the opinion of good judges, will be a valuable acquisition to sacred criticism.

Of *Oriental Literature* the votaries in America have been few, and of the fruits of their erudition little has been laid before the public. With regard, indeed, both to classic and oriental literature, the country has rather lost than gained ground within the last hundred years. For though a greater number of persons now gain a smattering of classic literature than at the beginning of the century; yet of those who pay attention to this study, much fewer are deeply and thoroughly instructed. And with respect to oriental learning, those who have any tolerable acquaintance with it in the United States are rare indeed. To the names of those Americans mentioned in former parts of this work, who were distinguished by their knowledge of the Hebrew language,

* This gentleman received the rudiments of his education at the academy of Dr. Francis Allison, before mentioned, where he was associated in study with Dr. Ewing, governor M'Kean, and a number of other Americans of literary distinction.

that of the rev. Dr. Stiles, president of Yale college, may be added. At the time of his death, he probably left no superior among his countrymen in this branch of literature *.

It has been asserted, and probably with truth, that in *Political science*, and in *Parliamentary eloquence*, the United States will bear a very honourable comparison with any nation. Beside the eminent political writers mentioned in a former page, the names of Adams, Hamilton, Madison, Jay, and several other native citizens, are known and celebrated in Europe. In addition to these, many counsellors and juridical characters might be enumerated, who not only hold a high station in their own country, but who would also be considered as ornaments of the bar and the bench, in the most enlightened countries of Europe.

* Ezra Stiles, D. D. and LL. D., was born at North Haven, in Connecticut, December 10, 1727. He was educated at Yale college, where he received the degree of A. B. in the year 1746. He was ordained to the work of the Gospel ministry, and installed pastor of a church at Newport, Rhode Island, in 1755; and was chosen president of the college at which he had received his education in 1777; in which important office he continued till his death, in 1795. Dr. Stiles was one of the most learned men that his country ever produced. He had a great amount of general knowledge, but he was particularly attached to oriental literature. Beside an acquaintance with the Hebrew language more than commonly extensive and profound, very few on that side of the Atlantic ever made so great progress in the knowledge of the Arabic, Chaldaic, Syriac, and Samaritan dialects; and on the Persic and Coptic he had bestowed some attention. He corresponded with learned *rabbis* in the Hebrew language, and revived the study of it in the college over which he presided. For upwards of thirty years he held a distinguished place among the active friends and promoters of literature in the United States.

The *Historians* of America were enumerated in a former chapter, and some references made to their respective merits *. None of them, indeed, can boast of having attained that elaborate polish, and that exquisite felicity of manner which distinguish the first class of English historians. But most of them are respectable writers; and several have acquitted themselves in a manner which does credit to their taste in composition as well as to their fidelity in collecting and communicating information †.

The respectable *Poets* of America are not numerous. The most conspicuous of these were noticed in a preceding division of this work ‡. It is not necessary here to repeat their names, or to attempt a comparative estimate of their merits. Their number is gradually increasing §; and when that leisure and encouragement shall be afforded to men of genius there, which are en-

* See vol. ii.

† Histories of different American states have been promised by several writers. The public particularly look forward with high expectation to the appearance of *The History of North Carolina*, which has been for some time prepared by Dr. Hugh Williamson, whose talents and learning are a pledge that it will prove an interesting and instructive work.

‡ See pages 67 and 68 of this volume.

§ Since the close of the eighteenth century, another writer has appeared, who, if we may judge by his first production, is destined to hold a high place in the catalogue of native poets of America. This writer is the rev. John B. Linn, D. D., of Philadelphia, whose *Powers of Genius*, a didactic and descriptive poem, published in 1801, displays imagination, taste, and reading. This poem was so favourably received, that a second edition was called for in less than a year, into which the author has introduced large and valuable improvements.

joyed in many parts of Europe, it may expect to produce poets, who shall vie with the most celebrated of the old world.

But in no respect does the literary enterprise of America appear more conspicuous than in the rapid increase of the number and circulation of *Newspapers*, within the last thirty years. The ratio and amount of this increase were stated in another place*. In this respect it goes beyond every other nation. It were well if these vehicles of information had improved as much in purity, intelligence, and instructiveness, as in other respects; but the blindest partiality for American literature must perceive and lament the sad reverse!

It may not be improper to attempt, in a few sentences, a comparative estimate of the extent to which different branches of knowledge are cultivated in different parts of the United States.

That amount of knowledge which is usually acquired at common schools, viz. reading, writing, and arithmetic, is more generally diffued among all classes of the people in New England, and particularly in Massachusetts and Connecticut, than in any other portion of the country, and indeed than in any other part of the globe. This may be ascribed to the superior excellence of their school establishments; to the number, piety, and diligence of the clergy; to the regular organisation of their towns and parishes; to the honourable point of light in which the instructors of

* See pages 91 and 92 of the present volume.

youth are considered *; and to the general spirit of activity and enterprise which must be admitted to enter into the national character of New England.

It may also be observed, as another circumstance of discrimination, that in the eastern states a larger portion of the youth pass through a regular collegiate course of education, than in any other part of the country. In New England, the mass of the people are more generally taught to respect literature, and to make exertions for conferring this advantage on their children. In that part of the union, also, the expense attending an academic course is rather less than in most of the other American seminaries. These two circumstances have a natural tendency to fill their colleges with a greater number of students than are to be found elsewhere.

The *Classic Literature* of the United States, as was before remarked, is almost every where superficial. It is believed, however, that the learned languages, and especially the Greek language,

† This circumstance has a most benign influence in New England. In the middle, but more especially in the southern states, the employment of a schoolmaster is considered by many as rather degrading, and has sometimes been used as a ground of reproach. The consequence is, that too many of the instructors of youth in these states are ignorant and vicious adventurers; those who are well qualified rather shunning an office to which so little respect is attached. In the New England states it is otherwise. Some of their greatest divines and statesmen were schoolmasters in early life. The employment is considered and treated as an honourable one. The consequence is, that the common parish schools are generally under the care of well informed and virtuous men.

are rather less studied in the eastern than in the middle and southern states. It is true, many more individuals attend to this branch of learning in the former than in the latter; but they read fewer books, and devote a less portion of time to the object*. For this fact, many reasons might be assigned; but it is not necessary to mention more than two. The one is, that, owing to the superior wealth enjoyed by a number of individuals in the middle and southern states, it was more common, during a great part of the eighteenth century, to send young men to Europe for their education from those states, than from New England. The youth, thus educated, might be expected of course to bring back with them to their native country a larger portion of classic literature than can be easily acquired in American seminaries. Another reason is, that, while almost all the instructors of youth in New England, and especially the higher classes of them, during the last hundred years, have been natives; a large portion of the superintendents of academies, and of the presidents and professors of colleges, in the middle and southern parts of the country, during the same period, were Europeans, and many of them eminently accomplished in classic literature. If, therefore, the knowledge in this branch of learning, acquired in the best

* The author is aware, that, in tracing the literary history of New England, the names of some classical scholars of great eminence are found. He means, however, only to speak of the degree of attention generally paid to classic literature by those who go through a collegiate course in the eastern states, and especially within the last twenty or thirty years.

seminaries of Europe, were usually more accurate and profound than could ordinarily be obtained from the native citizens, it must follow, of course, that those who derived their classical learning from the former of these sources, were in general more thoroughly instructed themselves, and consequently more capable of instructing others, than those who had access only to the latter.

In the study of *Oriental Literature*, it is believed that New England has generally excelled the middle and southern states. Certain it is, that we hear of more eminent orientalists in the former than in the latter; if we except a few foreigners occasionally residing in America. This we may ascribe to the great oriental learning of several of those distinguished divines who came with the first settlers to New England, or who soon afterward followed them thither. The influence of these men has continued, in some degree, to the present day. To this circumstance it may be added, that the university of Cambridge, in Massachusetts, is the only seminary of learning in the United States in which a professorship for instruction in the oriental languages has been steadily maintained through the whole of the eighteenth century.

In the cultivation of *Mathematics* and *Natural Philosophy*, it is difficult to say to what part of the country the preference ought to be given. Probably an impartial judge, taking the whole history of the country together, would give the palm, in this respect, to Pennsylvania and Massachusetts.

The sciences of *Chemistry, Natural History,* and *Medicine,* have long been, and continue to be, more successfully cultivated in the middle and southern than in the eastern states. The same reasons apply in this case that were suggested with respect to classic literature. Comparatively few young men have been sent, at any period, from the eastern states to European seminaries to complete their medical education. Beside this consideration, foreigners, even of literary and scientific character, have received less encouragement to settle in those states than in most other parts of the union. On the other hand, from the middle and southern states a number of young men have been sent every year to the medical schools of Europe, who not only attended the ordinary courses of instruction in *Medicine,* strictly so called, but also the lectures delivered on *Chemistry* and *Natural History,* as important auxiliary branches of philosophy. It is further to be observed, that several learned and enterprising foreigners, who visited and resided for some time in New York, Pennsylvania, Virginia, and South Carolina, devoted much of their time and attention to natural history*; excited some of the native citizens, in their respective neighbour-

* There is a particular reference here to Catesby, Garden, and Walter, who resided in South Carolina; to Mitchell, who spent a number of years in Virginia; to professor Kalm, who devoted several years to travelling in the middle states; to Schoepf and Wangenheim, who came to America with the German troops during the revolutionary war; to whom may be added Dr. Colden and Dr. Muhlenberg, whose talents and zeal in the study of botany have been before repeatedly mentioned.

hoods, to engage in this study *; and thus introduced that taste for inquiries of this nature which has ever since existed, in a greater or less degree, in some individuals in those states.

New England has given birth to the greatest number, and the most eminent of the native *Theological* writers of America. And there is no doubt that by far the larger portion of the *Sermons* printed in the United States, whether in volumes or single discourses, is produced in that part of the country. It may also be asserted, that almost all the valuable disquisitions on the *Philosophy of the human mind*, which have been published on the other side of the Atlantic, were written in New England.

In the literature and science of *Politics*, it is not easy to say which part of the country is most entitled to credit. If we pronounce in favour of those states, which have produced the greatest number of eminent political writers, we must give the first honours to Massachusetts, New York, Pennsylvania, and Virginia. But there is no subject more generally studied in every state in the union, than political science; none on which their literary men so frequently write; and of course none which so constantly calls forth the exertion of talents.

Of *Historical* composition, the eastern states have produced their full proportion, and rather

* It was probably owing to the conversation and influence of these, or some other foreigners visiting the country, that Clayton, Starke, Cary, and Greenway, of Virginia; and the Bartrams, Marshall, and others, of Pennsylvania, were so much devoted to botanical pursuits.

more. Of respectable *Poets*, they have given birth to a greater number than any other proportional division of the union. And in *Belles Lettres* generally, there is, without doubt, more cultivation in New England than in any other part of our country; if we except the larger cities in the middle and southern states.

With respect to the *Mechanic Arts*, New England has furnished her full proportion of those inventions and improvements which do honour to American genius. And with regard to the *Fine Arts*, *three* out of *four* of our greatest native *painters* were born in that division of the country.

It must, however, after all, be acknowledged, that what is called a *liberal education* in the United States is, in common, less accurate and complete; the erudition of their native citizens, with some exceptions, less extensive and profound; and the works published by American authors, in general, less learned, instructive, and elegant*, than are found in Great Britain, and some of the more enlightened nations on the eastern continent. These facts, it is apprehended, arise neither from any deficiency of talents in America, nor from any inaptitude in its soil or atmosphere to promote the growth of genius; but from one or another, and in some cases from a combination, of the following causes.

* It is not meant to be denied that a few of the works published in America are as profound and instructive as any on similar subjects published elsewhere. It is simply intended to give a *general* character of American publications, liable to such exceptions as the mind of the well informed reader will readily supply.

1. *Defective plans and means of instruction in the seminaries of learning.* The great majority of the colleges have very inadequate funds. The consequence is, that in most of them the professors are few in number, and have assigned to them too large a field of instruction. Hence they can convey but very superficial knowledge of the various branches which it is made their duty to teach; and if well qualified themselves, which is far from being always the case, find it impossible to do justice to the pupils. In some instances, also, the trustees or governors of American colleges, either from their own ignorance, or in compliance with popular prejudice, have so contracted the time requisite for completing a course of instruction, as to render it necessary wholly to dispense with, or lightly to hurry over, some of the most important branches of knowledge. Accordingly, in some of these institutions, mathematical science is unpopular, and the acquisition of as little as possible, especially of the higher branches of it, enjoined on the student. In others, classic literature, and especially the Greek language*, is in low estimation, and not more studied than is indispensably necessary to obtaining a *diploma*. If well bred scholars ever issue from such seminaries, they must be formed by a degree of private and individual application rarely to be met with in youth.

* In some American colleges, we are told that no more knowledge of Greek is required in those who graduate *bachelor of arts*, than that which may be derived from the Grammar and the Greek Testament.

2. *Want of leisure.* The comparatively equal distribution of property in America, while it produces the most benign political and moral effects, is by no means friendly to great acquisitions in literature and science. In such a state of society, there can be few persons of leisure. It is necessary that almost all should be engaged in some active pursuit. Accordingly, in the United States, the greater number of those who pass through a course of what is called liberal education, in the hurried manner which has been mentioned, engage, immediately after leaving college, in the study or business to which they propose to devote themselves. Having run over the preliminary steps of instruction in this business, probably in a manner no less hurried and superficial than their academic studies, they instantly commence its practical pursuit; and are perhaps, during the remainder of life, consigned to a daily toil for support, which precludes them from reading, and especially from gaining much knowledge out of their particular profession. Such is the career of ninety nine out of a hundred of those in America who belong to the learned professions. When the alternative either lies, or is supposed to lie between erudition and poverty, or comfortable affluence and moderate learning, it is not difficult to conjecture which side will be chosen; nor is it surprising, that, in such a state of things, there should be less profound erudition, less elegant accomplishment in literature, than where a considerable number enjoy all the advantages of exemption from laborious duties, and all the accommodations of opulent leisure.

To this circumstance may be ascribed the superficial and unpolished character of many of their native publications. All that their authors, in many cases, want, to render them more replete with instruction, more attractive in manner, and of course more worthy of public approbation, is *leisure*. But, able only to redeem a few hasty hours for literary pursuits, from the employments which give them bread, they must necessarily, if they publish at all, send forth productions, from time to time, bearing all the marks of haste and immature reflection.

3. *Want of encouragement to learning.* Men cannot be expected to labour without the hope of some adequate reward. Genius must be nourished by patronage, as well as strengthened by culture. Where substantial emoluments may be derived from literary exertion, there, and there alone, will it be frequently undertaken to any considerable extent. Hence, in those countries where genius and learning are best rewarded, there they are ever found to be most cultivated. In the United States, the rewards of literature are small and uncertain. The people cannot afford to remunerate eminent talents or great acquirements. Booksellers, the great patrons of learning in modern times, are in America too poor to foster and reward the efforts of genius. There are no rich *fellowships* in their universities to excite the ambition of students; no large ecclesiastical benefices to animate the exertions of literary divines*. Academic chairs are usually

* The author would by no means be understood to express an opinion, that such immoderately lucrative places, either in

connected with such small salaries, that they present little temptation to the scholar: and, finally, the state offers very inconsiderable motives for the acquisition of knowledge, and the exertion of talents. Its rewards are small, and its favour capricious. Can it be wondered then, that those who have some acquaintance with books, and hold important stations, are more anxious to secure pecuniary advantages, and to place themselves in a situation independent of popular favour, than to make advances in literature, or to do honour to their country by the display of intellectual preeminence?

Besides, the spirit of their people is *commercial.* It has been said, and perhaps with some justice, that the *love of gain* peculiarly characterises the inhabitants of the United States. The tendency of this spirit to discourage literature is obvious. In such a state of society, men will not only be apt to bend their whole attention to the acquirement of property, and neglect the cultivation of their minds as an affair of secondary moment; but letters and science will seldom be found in high estimation; the amount of wealth will be the principal test of influence; the learned will experience but little reward either of honour or emolument; and, of course, superficial education will be the prevailing character.

church or in state, are, on the whole, useful or desirable. He is persuaded that they are much more productive of mischief than of advantage. But that they often excite literary ambition, and afford, in many instances, convenient and useful leisure to literary characters, will scarcely be questioned by those who have paid any attention to the subject.

Nor is it of less importance here to recollect, that the nature of their connexion with Great Britain has operated, and continues to operate, unfavourably to the progress of American literature. Long accustomed to a state of colonial dependence on this enlightened and cultivated nation, they have also been accustomed to derive from her the supplies for their literary wants. And still connected with her by the ties of language, manners, taste, and commercial intercourse, her literature, science, and arts, may be considered as theirs. Being able, therefore, with so much ease, to reap the fruits of her fields, they have not sufficient inducement to cultivate their own. And even when an excellent production of the American soil is offered to the public, it is generally undervalued and neglected. A large portion of their citizens seem to entertain the idea, that nothing worthy of patronage can be produced on their side of the Atlantic. Instead of being prompted to a more liberal encouragement of genius because it is American, their prejudices, on this account, are rather excited against it*.

* The writer in the *Monthly Magazine*, whose strictures on American literature were before mentioned, represents the inhabitants of the United States as having strong prejudices in favour of their own productions, and ridicules them for preferring American publications to all others. In this, as well as in most of his assertions, he discovers profound ignorance of the subject. The fact is directly the reverse. Americans are too apt to join with ignorant or fastidious foreigners, in undervaluing and decrying their domestic literature; and this circumstance is one of the numerous obstacles which have operated to discourage literary exertions on that side of the Atlantic, and to impede their literary progress.

4. *Want of books.* In the capital cities of Europe, the votary of literature is surrounded with immense libraries, to which he may easily obtain access; and even in many of the smaller towns, books on any subject, and to almost any number, may be easily obtained. It is otherwise in America. There the student, in addition to all the other obstacles which lie in his way, has often to spend as much time and thought to obtain a particular book, as the reading it ten times would cost. Its public libraries are few, and, compared with those of Europe, small. Nor is this defect supplied by large private collections; these are also rare. And to render the evil still more grievous, the number of literary and enterprising booksellers is yet smaller. It is only within two or three years that America has begun to receive, with any kind of regularity or promptitude, the best British works as they issue from the press.

Such are some of the causes which have hitherto impeded the progress of American literature. Their influence, however, is gradually declining, and the literary prospects of that country are brightening every day. Letters and science are growing more important in the public estimation. The number of learned men is becoming rapidly greater. The plans and means of instruction in their seminaries of learning, though by no means improving in all respects, are, in some, receiving constant melioration. The emulation of founding and sustaining a national character in science and learning begins to be more generally felt, and, from time to time, will doubtless be augmented. A larger proportion of the grow-

ing wealth of their country will hereafter be devoted to the improvements of knowledge, and especially to the furtherance of all the means by which scientific discoveries are brought within popular reach, and rendered subservient to practical utility. American publications are every day growing more numerous, and rising in respectability of character. Public and private libraries are becoming more numerous and extensive. The taste in composition among their writers is making very sensible progress in correctness and refinement. American authors of merit meet with more liberal encouragement; and when the time shall arrive that they can give to their votaries of literature the same leisure and the same stimulants to exertion with which they are favoured in Europe, it may be confidently predicted, that letters will flourish as much in America as in any part of the world; and that they will be able to make some return to their transatlantic brethren, for the rich stores of useful knowledge which they have been pouring upon them for nearly two centuries.

RECAPITULATION.

WE have now made a hasty tour through one of the departments of the subject which we undertook to examine. From the foregoing survey, which, however tedious it may have appeared to the reader, is in reality a very rapid one, the eighteenth century appears to bear a singularly distinct and interesting character. In almost every department of knowledge we find monuments of enterprise, discovery, and improvement; and, in some, these monuments are so numerous, valuable, and splendid, as to stand without parallel in the history of the human mind. There have been periods in which particular studies were more cultivated; but it may be asserted, with confidence, that in no period of the same extent, since the creation, has a mass of improvement so large, diversified, and rich, been presented to view. In no period have the various branches of science, arts, and letters, received, at the same time, such liberal accessions of light and refinement, and been made so remarkably to illustrate and enlarge each other. Never did the inquirer stand at the confluence of so many streams of knowledge as at the close of the eighteenth century.

But, in order to bring more immediately and distinctly into view the leading characteristics of the last age as deducible from the statements which have been given, an attempt will be made to sum them up in the few following particulars:

1. The last century was preeminently an AGE OF FREE INQUIRY. No period in the history of man is so well entitled to this character. Two centuries have not rolled away, since the belief that the earth is globular in its form was punished as a damnable heresy; since men were afraid to avow the plainest and most fundamental principles of philosophy, government, and religion; and since the spirit of liberal inquiry was almost unknown. In the seventeeth century this spirit began to show itself; but it was reserved for the eighteenth to witness an indulgence and extension of it truly wonderful. Never, probably, was the human mind, all things considered, so much unshackled in its inquiries. Men have learned, in a greater degree than ever before, to make light of precedent, and to throw off the authority of distinguished names. They have learned, with a readiness altogether new, to discard old opinions, to overturn systems which were supposed to rest on everlasting foundations, and to push their inquiries to the utmost extent, awed by no sanctions, restrained by no prescriptions.

This revolution in the human mind has been attended with many advantages and with many evils. It has led to the development of much truth, and has contributed greatly to enlarge the bounds of literature, science, and general improvement. It has opened the way to a free communication of all discoveries, real or supposed, and removed various obstacles which long retarded the progress of knowledge. But this spirit of inquiry, like every thing else in the

hands of man, has been perverted and abused. It has been carried to the extreme of licentiousness. In too many instances the love of novelty, and the impatience of all restraint founded on prescription or antiquity, have triumphed over truth and wisdom; and, in the midst of zeal for demolishing old errours, the most sacred principles of virtue and happiness have been rejected or forgotten.

2. The last century may be emphatically called the AGE OF PHYSICAL SCIENCE. It was not till the seventeenth century that the physical sciences began to assume a conspicuous place among the objects of study. Before that period, the learned languages, ancient history, and the metaphysical jargon of the schoolmen, had chiefly engrossed the attention of literary and scientific men. From the time of Bacon and Kepler a taste for natural philosophy began to extend itself. This taste was cherished and improved by the scientific associations which began to be formed in different parts of Europe about the middle of the seventeenth century: but in the eighteenth it became far more predominant than at any former period, and may be said to form a prominent feature of the age.

It has been seen, that several branches of *Mechanical Philosophy*, wholly new, were introduced into the popular systems in the course of this period; and that in almost all the branches formerly studied, there were made immense discoveries and improvements. *Chemistry* has been so much improved and extended, both in its principles and application, that it may be pronounced a

new science. In *Natural History*, the progress of philosophers, within the last hundred years, has been no less signal and honourable. The amount of what has been accomplished in various plans of classification, in the corrections of nomenclature, and in additions to the former lists of specimens in natural history, more particularly in zoölogy, botany, mineralogy, is too great to be collected or exhibited by any individual. A similar extension of our knowledge has taken place in *Medicine*, in *Agriculture*, in *Geography*, and in the principles as well as practice of *Mechanic Arts*. All these come under the general denomination of *Physical Science*. It is too evident to admit of a doubt, that there never was a period in which so much enlightened attention was paid to objects of this kind, or any thing like such a sum of improvement introduced as in the eighteenth century.

Some observers of the revolutions and progress of science have divided the century under review into three parts, and considered each part as particularly distinguished by the cultivation of one of the principal physical sciences. From 1700 till 1735, the *Newtonian Philosophy* engaged the largest share of the attention of the learned. How great a portion of the publications and controversies of that day had a respect to this philosophy, the well informed reader will not be at any loss to recollect. From 1735 till about the year 1765 or 1770, may be called the period of *Natural History;* as the various branches of study included in this general denomination, more especially zoölogy and botany, were never before, in

any comparable degree, so much cultivated. For this prevalence of the study of natural history we are perhaps indebted to the genius, labours, and influence of no two individuals so much as to those of Linnæus, and the count de Buffon. From 1770 till 1801 may be styled the period of *Chemistry;* that science having given rise to more numerous experiments and publications during this period than any other. Those who had most influence in bringing into vogue this branch of physical science, and conferring upon it that importance and extent which it has gained, are Scheele, Klaproth, Lavoisier, and Priestley.

Upon a review of the foregoing sheets, it may also be remarked, that the physical sciences, during the period in question, appear to have been cultivated with unusual ardour in particular countries. In *Mechanical* and *Mathematical Philosophy*, it is not easy to say to which of the scientific nations of Europe the palm of superiority ought to be awarded. In *Chemistry*, France is doubtless entitled to the first place. After her, Germany, Great Britain, &c., follow in comparative merit. In *Natural History*, the different nations may be represented as standing in the following rank. First, France; second, Germany; third, Sweden; fourth, Great Britain; fifth, Switzerland, Italy, &c. In *Medicine*, Great Britain, beyond all doubt, has long held the first place; though it must be acknowledged, that the progress of medical science in France, Germany, and the United States, towards the close of the century, deserves to be noticed as very remarkable and promising. In *Geography*, Great Britain and

France must divide the larger portion of the mass of honours between them. In *Agriculture*, the highest praise is unquestionably due to Great Britain. And in all those scientific researches which bear upon arts, manufactures, and economy, the last mentioned country must also be pronounced to stand first in order.

3. The eighteenth century may with propriety be styled the AGE OF ECONOMICAL SCIENCE. In all preceding ages science and the economical arts were too generally viewed as unconnected. The philosopher thought it beneath his dignity to direct his inquiries to the aid of the mechanic and to the various details of public and domestic economy; and the mechanic and economist had been taught to consider the inquiries of the philosopher as mere curious speculations, with which the practical concerns of life had little to do. The eighteenth century has produced a signal revolution, both in the aspect of scientific investigations and in the state of public opinion on this subject. Philosophy has assumed a more practical and useful form: the artist and the philosopher have learned to go hand in hand. Many modern discoveries, in different branches of science, and especially in Natural Philosophy and Chemistry, while they gratify liberal curiosity and give pleasure to the man of speculation, have also rendered essential service to the Mechanic Arts, to Agriculture, to Medicine, to Domestic Economy, and, in general, to the abridgement of labour and to the more easy and cheap preparation of the various comforts and elegancies of life. It would be easy to give a

catalogue of economical philosophers of the eighteenth century who were never equalled by any of preceding times. To mention no more, the illustrious American, count Rumford, at the close of this period, presented to the world an example of practical science of which we shall perhaps search in vain for a parallel in the history of man.

4. The last century may also, in a peculiar and distinguishing sense, be called THE AGE OF EXPERIMENT. The mode of pursuing knowledge by observation, experiment, analysis, and an induction of facts, though not absolutely begun by lord Bacon, was for the first time employed to any considerable extent by that enlightened philosopher. The influence of his example in this respect in the sixteenth century (in which he lived) was comparatively small. In the seventeenth, his plan of philosophising was more frequently adopted. But in the eighteenth it obtained an ascendancy and prevalence never before known in the history of science. Never were there so many heads and hands at work to develope the arcana of nature, to investigate her laws, and to bring former principles, as far as possible, to the test of weight, measurement, and vision. The amount of experiments of different kinds, and instituted for different purposes, laid before the public, within this period, by individuals, and by learned societies, forms a mass of stupendous extent, and presents one of the most prominent features of the age.

These remarks apply almost exclusively to the physical sciences; for there is too much reason to

suppose, as will be afterward shown, that, in the philosophy of the human mind, and especially of human duty, the prevailing character of the age, and particularly of the latter part of it, has been that of *vain speculation* and *fantastic theory*, rather than of principles dictated by sober and enlightened experience. But in the physical sciences, amid much false theory, such an immense variety and amount of *facts* and experiments have been laid before the public, as eminently to distinguish the eighteenth from all preceding centuries.

5. The last age was remarkably distinguished by REVOLUTIONS IN SCIENCE. Theorists were more numerous than in any former period, their systems more diversified, and revolutions followed each other in more rapid succession. In almost every department of science, changes of fashion, of doctrine, and of authority, have trodden so closely on the heels of each other, that merely to remember and enumerate them would be an arduous task.

The frequency and rapidity of scientific revolutions may be accounted for in various ways. The extraordinary diffusion of knowledge; the swarms of inquirers and experimenters every where abounding; the unprecedented degree of intercourse which men of science enjoyed; and, of consequence, the thorough and speedy investigation which every new theory was accustomed to receive, all led to the successive erection and demolition of more ingenious and splendid fabrics than ever previously, within the same compass of time, passed before the view of man.

The rapid succession of discoveries, hypotheses,

theories, and systems, while it has served to keep the scientific world more than ever awake and busy, has done mischief by perplexing the mind with too many objects of attention, and by rendering the labour of the student more extensive, difficult, and tedious. If, in the seventeenth century, the inquirer had reason to complain, that the shifting aspect of science rendered necessary the most unremitting vigilance, and an endless repetition of his toil, this complaint might have been urged with a hundred fold more reason in the eighteenth. The advantages, however, of this state of things may be considered, on the whole, as predominant. The ardour, the competition, and the diligence in the pursuit of knowledge which it has inspired, deserve at once to be recognised as beneficial, and to be noticed as distinguishing characteristics of the age.

6. The last century is preeminently entitled to the character of THE AGE OF PRINTING. It is generally known, that this art is but little more than three centuries old. Among the ancients, the difficulty and expense of multiplying copies of works of reputation were so great, that few made the attempt; and the author who wished to submit his compositions to the public was under the necessity of reciting them at some favourable meeting of the people *. The disadvantages attending this state of things were many and great. It repressed and discouraged talents, and rendered the number of readers extremely small. The invention of *printing* gave a new aspect to litera-

* See Additional Notes *(P)*.

ture, and formed one of the most important æras in the history of human affairs. It not only increased the number and reduced the price of books, but it also furnished authors with the means of laying the fruits of their labours before the public, in the most prompt and extensive manner. Considering this art, moreover, as a great moral and political engine, by which an impression may be made on a large portion of a community at the same time, it assumes a degree of importance highly interesting to the philanthropist, as well as to the scholar *.

The extension of this art in the eighteenth century forms one of the leading features of the age. In the sixteenth and seventeenth centuries, especially in the former, printing presses were few, and of course publication was by no means easy. The century under review exhibited an immense extension of the art. This extension was not only general, but so great, that the most moderate estimate presents a result truly stupendous. There was probably a *thousand fold* more printing executed in the course of this century, than in the whole period that had before elapsed since the invention of the art †. The influence of this

* See Additional Notes *(2)*.

† This will appear a moderate calculation, when it is considered that there is a prodigious increase, not only in the number of new works annually issued from the press, but also in the extent and number of *editions* constantly demanded by the public. And when to this is added the amount of printing which has been continually going forward, particularly within the last fifty years, in furnishing the whole literary world with such a number and variety of periodical publications, as Reviews, Maga-

fact, in increasing the sum of public intelligence, and in keeping the minds of men awake and active, cannot but be noticed by the most superficial observer of the character of the period under consideration. Printing presses have not only become numerous in the populous cities, in every literary portion of the world; but also in remote parts of the country these engines for the diffusion of information are found: thus furnishing the good with the means of sowing the seeds of truth and virtue, and the wicked with the means of scattering poison to an extent never before witnessed in human society.

7. The last century is entitled to distinction above all others, as THE AGE OF BOOKS; an age in which the spirit of *writing*, as well as of *publication*, exceeded all former precedent. Though this is closely connected with the foregoing particular, it deserves a more distinct and pointed notice. Never assuredly did the world abound with such a profusion of various works, or produce such an immense harvest of literary fruits. The publication of books in all former periods of the history of learning laboured under many difficulties. Readers were comparatively few*;

zines, Newspapers, &c., the estimate above stated will probably be thought rather to fall below than to exceed the truth.

* "To prove the paucity of readers," in the seventeenth century, "it may be sufficient to remark, that the British nation had been satisfied from 1623 to 1664, that is, a period of forty-one years, with only *two* editions of the works of Shakspeare, which probably did not together make one thousand copies." *Life of Milton, by Johnson.*

Whereas, in the eighteenth century, from 1733 to 1778, that

of course writers met with small encouragement of a pecuniary kind to labour for the instruction of the public *. Hence, none in preceding centuries became authors, but such as were prompted by benevolence, by literary ambition, or by an enthusiastic love of literature. But the eighteenth century exhibited the business of publication under an aspect entirely new. It presented an increase in the number, both of writers and readers, almost incredible. In this century, for the first time, AUTHORSHIP BECAME A TRADE. Multitudes of writers toiled, not for the promo-

is, in forty-five years, *ten* large and splendid editions of the same author were given to the public, and, probably, at least *ten more*, of a less magnificent kind, in various parts of the British dominions. Allowing each of these editions to have consisted of two thousand copies, which, on an average, may be supposed a moderate allowance, the number of copies of one publication called for by the English literary public, in a given period of the eighteenth century, will be found *forty times* greater than the number called for during a period nearly equal in the seventeenth.

* The advantage now enjoyed by authors, of deriving large profits from the sale of *copy-rights*, is wholly modern. Mr. Baretti, a friend of Dr. Johnson, who resided for some time in England, about half a century ago, told the doctor, that he was the first man in Italy who received money for the *copy-right* of a book. *Boswell's Life of Johnson*, vol. ii, p. 503. Though this practice had been established long before in Great Britain, yet even there the instances of literary profit were rare, and the amount in general extremely small, until the middle, and toward the close of the eighteenth century. Milton sold his *Paradise Lost* for *five pounds*, on condition of receiving some small subsequent emolument, if the sale should prove ready and extensive. Forty six years afterward, Mr. Pope received *two hundred pounds* for each volume of his translation of the *Iliad*, or *twelve hundred pounds* for the whole work. And towards the close of the century, the rewards of literary labour were, in many instances, augmented four, six, and even ten fold.

tion of science, nor even with a leading view to advance their own reputation, but for the market. Swarms of *book-makers by profession* arose, who inquired, not whether the subjects which they undertook to discuss stood in need of further investigation; or whether they were able to do them more ample justice than their predecessors; but whether *more books* might not be palmed upon the public, and made a source of emolument to the authors. Hence, there were probably more books published in the eighteenth century, than in the whole time that had before elapsed since the art of printing was discovered; perhaps more than were ever presented to the public, either in manuscript, or from the press, since the creation.

This unprecedented and wonderful multiplication of books, while it has rendered the means of information more easy of access, and more popular, has also served to perplex the mind of the student, to divide his attention, and to distract his powers. Where there are so many books, there will be less deep, original, and patient thinking; and each work will be studied with less attention and care. It may further be observed, that the abridgements*, compilations, epi-

* Never was there an age in which the *abridgement* of voluminous works was carried to so great and mischievous a length as in the eighteenth century. This mode of treating a prolix writer may, in some cases, be justified; but, in general, it deserves to be reprobated as a practice both presumptuous and unfair. Dr. Johnson often spoke of this practice in terms of warm and just indignation. Once, in particular, hearing a friend observe, that "abridging a good book was like presenting a cow with her head and tail cut off," he replied, with equal wit and severity, "No, sir, it is making a cow to have a calf."

tomes *, synopses, and selections, which are daily pouring from the press in countless numbers, and which make so large a part of modern publications, have a tendency to divert the mind from the treasures of ancient knowledge, and from the volumes of original authors †. Thus the multiplicity of new publications, while they would seem at first view highly favourable to the acquisition of learning, are found, as will be afterward more fully shown, hostile to deep and sound erudition.

The allurements to authorship which the modern state of literature holds out also lead to another evil, viz. the *hasty production of books*. The *nonum prematur in annum* of former times has been too generally disregarded or forgotten by late writers. Authors, instead of holding their works under the polishing hand of criticism for many years, are now tempted prematurely to hasten before the public. We have lately heard of an *epic poem*, nearly as long as the *Paradise Lost*, composed in *six weeks!* and of writers on the most important and difficult subjects running a race with the press. The mischiefs arising from such rapidity of composition are many and great. Writers of the most exalted genius and extensive

* "Epitomes are the moths and corruptions of history, that have fretted and corroded the sound bodies of many excellent histories, and wrought them into base and unprofitable dregs."—BACON.

† "It is observed," says Dr. Johnson, "that *a corrupt society has many laws;* I know not whether it is not equally true, that *an ignorant age has many books.* When compilers and plagiaries are encouraged, the treasures of ancient knowledge will lie unexamined, and original authors will be neglected and forgotten."

learning, when they proceed in this manner, must throw into their volumes much crude and indigested matter; and when those of ordinary capacity presume to indulge in the same haste, nothing can be expected from them but half-formed conceptions, and useless, if not mischievous productions. Hence, the last age is distinguished above all others, by producing thousands of worthless volumes, which encumber the shelves of libraries, and consume, without profit, the time of unwary readers.

The *spirit of trade*, by which the authors and publishers of books first began, in the eighteenth century, to be actuated in any considerable degree, has produced, and still continues to produce another serious evil. It too often leads men to write, not upon a sober conviction of truth, utility, and duty, but in accommodation to the *public taste*, however depraved, and with a view to the most *advantageous sale*. When pecuniary emolument is the leading motive to publication, books will not only be injuriously multiplied, but they will also be composed on the sordid calculation of obtaining the greatest number of purchasers. Hence the temptation to sacrifice virtue at the shrine of avarice. Hence the licentious and seductive character of many of those works which have had the greatest circulation in modern times, and which have produced the greatest emolument to their authors.

From the unprecedented spirit of publication which the eighteenth century exhibited, it has happened, as a natural consequence, that the character of an *author* has become lower in the pub-

lic estimation, than it generally stood in preceding ages. Every object loses something of its value in the public esteem, in consequence of being cheap and common. Thus it has fared with the dignity of authorship. Persons of this profession have become so numerous in society, many of those who engage in it discover such a selfish and mercenary spirit, and it is found so easy a task to compile a book, that their importance has suffered a diminution in some degree corresponding with the number and worthlessness of their literary labours.

Another signal revolution in the literary character of the eighteenth century, and closely connected with the multiplication of books, is, that *Booksellers* have become the *great patrons of literature*. In ancient times, authors having no hope of finding a remuneration for their labour in the general sale of their works, were under the necessity of attaching themselves to some private patron, who, to great wealth, united a fondness for literature and literary men. Some of the most accomplished writers of antiquity would have been unable to pursue their studies, or to complete those works which have so long instructed and delighted the world, had they not enjoyed the smiles of certain individuals of opulence and taste, who made it their pride and pleasure to foster literary merit. The same state of things existed, in a certain degree, for nearly two centuries after the art of printing was discovered. The number of publications and of readers was comparatively so small, that booksellers were few; and those who engaged in this employment had little business,

and of course occupied a humble station in society. The eighteenth century exhibited this class of tradesmen under an aspect entirely new. The great increase in the number of readers and purchasers of books, and the corresponding increase in the number of publications, and in the extent of the editions, both of old and new works, have raised the bookselling business to a very important and lucrative employment. The number of those who engage in this business is probably increased, taking the literary world at large, more than a *hundred fold**. The extent and profits of their trade have grown in a still greater proportion. These circumstances have enabled them to become the patrons of learning; to pay generously for literary labours; and to put it in the power of authors to appear more speedily and advantageously at the bar of the public. Hence the ease of publication. And hence the countless number of volumes, which could never have found their way to the press in a different state of society.

8. The eighteenth century is distinguished for the UNPRECEDENTED DIFFUSION OF KNOWLEDGE. Not only has a greater number of books issued

* The increase in the number of *Printers* and *Booksellers* in America, during the period in question, was at least in this proportion. And there can be no doubt, that a similar increase has taken place in most other parts of the literary world. In the city of *Paris*, there are said to be four hundred and fifty-five *Booksellers*, and three hundred and forty *Printers*. In *London*, the number, though not so large, is very great. In *Germany* the tradesmen of these classes are probably more numerous, but more scattered through the empire.

from the press, during this period, than the accumulated product of all preceding ages can display; but these books have had a more general circulation than in any former period. To read, a little more than a century ago, was by no means a general object of attention. At that time, neither the middle classes of society, nor oftentimes persons of high rank, thought ignorance a disgrace. The female sex seldom resorted to books, either for amusement or instruction; and many respectable habitations scarcely contained a volume excepting the Bible, and one or two devotional books of standard value. In fact, as books of science then rarely appeared, so "those which did appear, containing the accumulated stores of profound research, and extensive reading, were neither accessible nor intelligible, but by a few who had leisure, much previous information, and perseverance." It is true, as will be presently acknowledged, that such as, at that time, professed to devote themselves to study, were, in general, at least equally, if not more learned, than those who profess to belong to the same class at the present day. But the number of those at the end of the eighteenth century, who were in the habit of reading a few books, and who possessed a moderate and respectable share of information, was certainly far greater than in former periods of the history of man.

Some modern zealots, indeed, have gone beyond all just bounds, in describing the illumination and refinement of this period. We are not so much wiser than our forefathers, as the sanguine and ignorant would sometimes represent

us. But there is surely no extravagance in saying, that there never was an age in which knowledge of various kinds was so *popular* and so *generally diffused*, or in which so many publications were circulated and read. The elements of literature and science have descended from the higher classes of society, and from universities, to the middle, and in some instances to the lower orders of men. Speculations which were once, in a great measure, confined to the closets of the curious, have gradually mingled themselves with the most prevailing and familiar doctrines of the day. Many modern females are well informed, and a few extensively learned. The common people read and inquire to a degree that would once have been thought incredible. Seminaries of learning are multiplied beyond all precedent. The number of students which they contain is, in general, much greater than formerly. Modern books, even those on subjects of science, are now divested of their former envelopment of dead languages, and presented in a plain and popular dress. Booksellers, more rich, active, and enterprising, than they were a century ago, now find it their interest to scatter books in every direction, and to convey some knowledge of them to every door. Libraries have become far more numerous, and are placed on a more popular footing than formerly. Circulating libraries* have been in-

* *Circulating Libraries*, it is believed, were first instituted in the eighteenth century. The first establishment of this kind in London was commenced by one Wright, a bookseller, about the year 1740. In 1800 the number of these libraries in Great Britain was not less than *one thousand*.

troduced during this period, and have contributed greatly to extend the taste and the means of reading; and, finally, periodical publications, and a variety of other small works, which might be procured at a trifling expense, and understood by moderate capacities, or with little previous information, broke down the large masses of science and learning, presented their component materials in small and convenient portions, and thus fitted them to be received by every mind.

9. But, notwithstanding the wonderful multiplication of books, the last century may with propriety be styled THE AGE OF SUPERFICIAL LEARNING. *Erudition*, strictly so called, has been evidently on the decline, from the commencement of this period to its termination. The number of *readers*, indeed, and of those who assume to themselves the title of *literary* men, was doubtless far greater at the close of the century than ever before, since reading was known: but the number of the truly and profoundly learned was perhaps never so small, in proportion to the whole number who rank with men of letters and science. This is probably owing, in a great measure, to the following circumstances.

The artificial, luxurious, and dissolute character of the age was not favourable to laborious and patient study. Few can be expected to devote themselves habitually to that kind of reading which requires deep reflexion, and long-continued attention, amid the solicitations of company and pleasure, and the thousand dissipating attractions which an age of refinement and of greatly extended intercourse presents.

Another circumstance, which has contributed to characterise the eighteenth century as an age of superficial learning, is the unprecedented circulation of Magazines, literary Journals, Abridgements, Epitomes, &c., with which the republic of letters has been deluged, particularly within the last forty years. These have distracted the attention of the student, have seduced him from sources of more systematic and comprehensive instruction, and have puffed up multitudes with false ideas of their own acquirements. The mass of new, hastily composed, and superficial works, has engrossed the minds of by far the greater number of readers, crowded out of view the stores of ancient learning, and even many of the best works of the preceding century, and taught too many to be satisfied with the meagreness of modern compends and compilations. It may be safely pronounced, that the eighteenth century, not only with regard to the treasures of classic literature, but also with respect to a knowledge of the best writers of all the preceding seventeen centuries, was retrograde rather than progressive throughout the whole of its course.

An additional cause, unfavourable to deep and sound erudition, is the nature of those employments which in modern times solicit the attention of mankind. In every age, a great majority of men are destined to a laborious and active life. But in the eighteenth century, the wonderful extension of the commercial spirit, the unprecedented multiplication of the objects and means of mercantile speculation, and the numerous temptations to a life of action rather than of study, have

brought more into vogue than formerly that light, superficial, and miscellaneous reading, which fits men for the counting house, and the scene of enterprise and emolument, rather than the recondite investigations of the closet.

There is also another cause which prevents individuals from acquiring the same depth of learning which was formerly attained. "The circle of human intelligence, within a hundred years, has been greatly extended: the objects of curious speculation, and of useful pursuit, have multiplied: many new branches of abstract science have been invented: many theories in physical philosophy have been established: the mechanical arts have received great enlargement and improvement: criticism has had its principles rendered more evident, and its application more exact: the analysis of the human mind is now generally an object of inquiry; and modern authors, in voluminous metaphysical treatises, in histories, in poems, and in novels, unfold the seminal principles of virtue and vice, and sound the depths of the heart for the motives of human action. Of these objects of mental occupation every man, who is elevated above the lower orders of society, is obliged to know something, either by the love of novelty, or by the shame of ignorance. But if the objects of inquiry be numerous, each cannot be investigated profoundly; the powers of the human mind are finite, and the union of accuracy and universality of knowledge is a chimera. In this case, therefore, the search will not be for complete and systematic treatises, which examine a subject on all sides, and in its minutest parts,

detect it in its most obscure beginnings, and trace its influence in the remotest consequences; but for books of less tremendous bulk, which exhibit the subject in its most material points, preserving general outlines, and principal features *."

To the causes above mentioned may be added one other, derived from the more frequent intercourse of men in advanced civilisation. "In this intercourse, a taste for learned and ingenious conversation has arisen, and the natural desire of superiority impels men to excel in it. But in collecting means for acquiring this excellence, the specious rather than the useful are sought. Facts are stored, not for the exercise of rational criticism, nor for the deduction of important truth, but that they may be again distributed †." Hence the temptation to study many subjects superficially, but to gain the complete mastery of none. Hence those scraps and shreds of knowledge which are daily served up in periodical publications, and scattered through all ranks of society, excepting the very lowest, in popular manuals, form a large part of that learning which is daily sported in the social circle, and in the conflicts of disputation.

10. From the details which have been given in the foregoing chapters, it appears that the last century may, with peculiar propriety, be styled THE AGE OF TASTE AND REFINEMENT. In the productions of bold and original genius, though

* *Monthly Review*, vol. xxix, p. 302, N. S.

† *Ibid.*

greatly fruitful, it has perhaps been exceeded by some former ages*; but in the general prevalence of taste and refinement, it may be confidently asserted that no age ever equalled the last. This remark might be illustrated at great length, by recurring to the state of the various branches of human knowledge and art during the period in question.

In the *Physical Sciences* it might be shown, that, though great and splendid discoveries have been made in this period, much more has been done in pursuing former discoveries, in extending the limits of principles before established, in forming systems of classification, arrangement, and nomenclature, and in conferring beauty and elegance on every part. In the *Mechanic Arts*, also, inventions have been made highly honourable to the genius of the age; but the improvements in simplicity, convenience, accuracy, and exquisite nicety of workmanship, are far more numerous and more strikingly characteristic of the age †. But, perhaps, to *Polite Literature* this general remark may be applied with still more confidence, and to a greater extent. The poets and historians of the eighteenth century have the advantage of all their

* "Much has been *written* in this age," says Voltaire, "but *genius* belonged to the last."

† It cannot be denied, that some articles of ancient manufacture which have come down to our times discover an exquisite polish and elegance of workmanship, which we seldom find exceeded, perhaps not equalled, at the present day. But that the mechanic arts, *in general*, reached a degree of improvement in the eighteenth century which they could never before boast, particularly in simplicity, convenience, and beauty, it is presumed none will hesitate to admit.

predecessors in no respect so decidedly as in uniform correctness, polish, and taste. In a word, the *Master Builders* in the temple of knowledge, during this period, have been perhaps fewer in number than in several preceding centuries; but neither the number nor the success of those who busied themselves in extending, polishing, and adorning the fabric, was ever so great.

This feature of the last age remarkably appears in the state of what may be called the *mechanical* part of literature. The refined, elegant, and expensive manner in which books have been for some time printed and decorated, more especially within the last ten or fifteen years of the century, as it marks a period of luxury and taste, so we may question whether it has not been carried to an injurious length. If this system of sacrificing the useful to the ornamental be pursued much further, it must contract the circulation of books, and of course diminish the number both of authors and of readers. Some have even pronounced, that it must operate to produce a "counterrevolution in the republic of letters, and introduce all the misfortunes of a manuscript age."

11. The century under consideration may be denominated THE AGE OF INFIDEL PHILOSOPHY. There have been in every age "profane and vain babblings, and oppositions of science falsely so called." But it may be confidently pronounced, that there never was an age in which so many deliberate and systematic attacks were made on Revealed Religion, through the medium of pretended science, as in the last. A few truly learned and ingenious men made such attacks the main

business of their lives; and many others, of humbler note, who vainly aspired to the name of *philosophers*, have directed their puny efforts toward the same object.

The doctrine of *Materialism* probably had a greater currency among certain classes of the learned, during this period, than in any former age enlightened by Christian knowledge. It was, indeed, pushed to an atheistical length by some who assumed the name and gloried in the character of philosophers. *Astronomical records* have been fabricated or misinterpreted for the purpose of discrediting the sacred chronology. The natural history of the *Earth*, of *Man*, and of other animals, has been pursued with unwearied diligence, to find evidence which should militate against the information conveyed in the Scriptures. The discoveries in *Chemistry* have been tortured to furnish a physical solution of all those phenomena of motion, life, and mind, which are unanimously considered, by more sober inquirers, as teaching the immateriality of the soul, and as proclaiming the existence of a supreme intelligent FIRST CAUSE. Systems of *Moral* and *Political* philosophy have been formed, by which their authors meant to strike at the root of evangelic truth. And all the stores of ancient and modern literature have been ransacked to obtain some pretext for disbelieving the precious Records which God condescended to bestow on our fallen race.

This rage for impious theory, though it had long before existed, began more boldly and ex-

tensively to proclaim its views about twenty years before the close of the period under consideration. There is scarcely a single branch of human knowledge to which this scientific and literary perversion has not reached; and scarcely a ridiculous or odious form of errour to which it has not given rise. Were these motley and grotesque figures, formed by perverted genius, only intended to traverse the stage, for the temporary purpose of amusement, they might excite less of our attention; but, considering them, as their framers have anxiously desired to make them be considered, as guides to knowledge, and as rules of action, every lover of human happiness will regard them with more serious and indignant feelings. And although their influence has been counteracted by means which will be presently mentioned, they have yet poisoned the principles and completed the ruin of millions.

Almost every successive age has some peculiarity in the style and manner of its philosophers and writers; some particular *livery*, which serves to distinguish it from other times. The scientific livery of the last age is, as we have seen, a fantastic patch-work, enriched with many beautiful and precious materials, but deformed by the mixture of many gaudy colours and false ornaments. Among the latter we may reckon that continual prating about the "energies and progress of Mind," the "triumph of Reason," the "omnipotence of Philosophy," the "perfectibility of Man," &c., which was never before so loud and frequent; which has been employed, with particular volu-

bility and success, by infidel philosophers; and which, amid continual and abundant refutations, is yet clamorous and obtrusive.

12. The period under review may be pronounced THE AGE OF CHRISTIAN SCIENCE. This is by no means inconsistent with the statement in the last particular; for, after all the attacks of infidelity, and of theoretical philosophy, the Religion of Christ, when contemplated through the medium of science, has had a complete and unprecedented triumph during this period. It has been often objected to Christianity, that it is unfavourable to the progress of knowledge; that it discourages scientific enterprise; that it is inimical to free inquiry, and has a tendency to keep the minds of men in blindness and thraldom. The history of the last concurs with that of many preceding centuries, in demonstrating that the very reverse of what the objection states is the truth. *Christian nations*, during the period in question, have been, of all others, most remarkable for favouring the advancement of liberal knowledge. In those countries in which religion has existed in its greatest *purity*, and has enjoyed the most general *prevalence*, literature and science have been most extensively and successfully cultivated. It is also worthy of remark, that, among all the professions denominated *learned*, the *clerical* profession may be considered as having furnished as many, if not more, authors of distinction than any other. And if we join to the *clergy* those lay-authors who have been no less eminent as *Christians* than as scholars, the predominance of learn-

ing and talents on the side of Religion will appear too great to admit of comparison.

But this is not all:—as the last century is remarkable for having furnished an unprecedented number of attacks on Revealed Religion, through the medium of science; so it is also no less remarkable for having derived much support to Revelation, and much valuable illustration of the Sacred Writings, from the inquiries of philosophers and the observations of travellers. Many of the discoveries made in mechanical and chemical philosophy, during this period, have served to elucidate and confirm various parts of the Christian Scriptures. Every sober and well directed inquiry into the natural history of man, and of the globe we inhabit, has been found to corroborate the Mosaic account of the creation, the fall, the deluge, the dispersion, and other important events recorded in the sacred volume. To which we may add, that the reports of voyagers and travellers, within this period, have no less remarkably served to illustrate the sacred records, and to confirm the faith of Christians. Never was there a period of the same extent in which so much light and evidence in favour of revelation were drawn from the inquiries of philosophy as in that which is under review: nor was it ever rendered so apparent, that the information and the doctrines contained in the sacred volume perfectly harmonise with the most authentic discoveries, and the soundest principles of science.

13. The last century may be emphatically called THE AGE OF TRANSLATION.—"Of almost

every other kind of writing the ancients have left us models which all succeeding ages have laboured to imitate; but translation may justly be claimed by the moderns as their own."—The *Greeks*, so far as we know, achieved nothing worthy of notice in this department of literary labour. The *Romans*, who confessed themselves the scholars of the Greeks, made a few versions of those writings which they followed as models*; but it does not appear that any of their writers grew eminent by translation; and, indeed, it was probably more frequent to translate for private exercise or amusement than for fame.

For three centuries past the art of translation has been gradually gaining ground throughout the literary world, both in frequency and elegance†. But the extension of this art, in both

* Every man in Rome who aspired to the praise of literature thought it necessary to learn *Greek*, and therefore stood in little need of translations. Translation, however, was not wholly neglected. Dramatic poems could be understood by the people in no language but their own; and the Romans were sometimes entertained with the tragedies of Euripides, and the comedies of Menander. Other works were sometimes attempted: in an old scholiast there is mention of a *Latin Iliad*, and we have not wholly lost Cicero's version of the poem of Aratus.—*Idler*, ii, No. 68.

† Chaucer, the father of English poetry, was among the first translators into our language. He left a version of Boethius *On the Comforts of Philosophy*, which, though dull, prosaic, and inelegant, held, at that early period, a conspicuous place. Some improvement in the art of translation was made in the reign of queen Elizabeth; but still any thing like freedom and elegance was seldom attained. It was not till towards the close of the seventeenth century that this art began to be generally understood, and its proper principles reduced to practice. It is un-

these respects, during the period under review, was so great and signal, that it must be considered as forming a remarkable feature of the age.—Translations, from every polished language, into every other of this character, have not only become numerous, but have also attained, particularly within the last fifty years, a degree of refinement and excellence never before known. Versions of the Greek and Roman *Classics* have especially abounded during the period in question. And though this circumstance has contributed to render some knowledge of those great works of antiquity more popular, it has also been connected with the decline of classic literature, which was before mentioned. As elegant versions increased in number and circulation, it was natural that the originals should become gradually more neglected.

The number and excellence of modern translations may be considered as removing one of the impediments which bar the way to science, and as diminishing the inconvenience arising from the multiplicity of languages. But the length to which this practice is now carried will probably be found to discourage the study of languages, to diminish literary industry, and of course to render knowledge still more superficial.

14. The last century may further be denominated THE AGE OF LITERARY HONOURS. The practice of conferring the honours of literary in-

necessary to add, that since that time many specimens of translation have been presented to the world which are altogether unequalled in the history of preceding ages.

stitutions on individuals of distinguished erudition commenced in the twelfth century; when the emperor Lotharius, having found in Italy a copy of the Roman civil law, ordained that it should be publicly expounded in the schools: and that he might give encouragement to the study, he further ordered, that the public professors of this law should be dignified with the title of *doctors**. Not long afterward the practice of creating doctors was borrowed from the *lawyers* by *divines*, who, in their schools, publicly taught divinity, and conferred *degrees* on those who had made great proficiency in this science†.

From this period till the beginning of the eighteenth century the conferring of literary honours was generally conducted, by the respectable universities of Europe, in a cautious, discriminating, and judicious manner. And even in the former half of the century under review, these honours were bestowed with much comparative reserve and deliberation‡. But in the latter half of this period, the practice of literary institutions in

* The first person created a *doctor*, after this ordinance of the emperor, was Bulgarus Hugolinus, who was greatly distinguished for his learning and literary labour.

† This practice of conferring degrees in *divinity* was first adopted in the universities of Bologna, Paris, and Oxford.—See Mather's *Magnalia Christi Americana*, b. iv, p. 134.

‡ It is remarkable that the celebrated Dr. Samuel Johnson, when he had made great proficiency in literature, could not obtain the degree of *master of arts* from Trinity college, Dublin, though powerful interest was made in his behalf for this purpose. Instances of the failure of applications of a similar kind, made in favour of characters still more distinguished than Johnson was at that period, are also on record.

this respect was materially different. As the students in these institutions became more numerous, and literary characters in general more common, universities began to bestow their laurels with a more free and incautious hand. Genuine erudition and talents began to be less considered as qualifications, than station, popularity, or wealth. By these means, collegiate honours have become by far more cheap and common, during the period under review, than in any former age; but, as the natural consequence of this, they have also become less valuable and less esteemed.

The same remarks, in substance, apply to membership in literary and scientific societies. Before the eighteenth century, honours of this kind were conferred on few or none but those who were eminent for learning or talents. But the popular diffusion of knowledge, and the artificial state of society which distinguish the last age, led to a more unsparing distribution of honours of this kind; so that literary and scientific associations, at the close of the period which is the subject of this retrospect, consisted of a larger number of members than ever before, and more particularly of members of an unqualified and inefficient character.

15. The eighteenth century was preeminently THE AGE OF LITERARY AND SCIENTIFIC INTERCOURSE. It has been repeatedly remarked in the foregoing sheets, that the extension of commerce, the discoveries in geography, and the improvements in navigation, in the mechanic arts, and in the modes of travelling, have led to a more general intercourse among mankind than in any

former period. This remark may be extended to the republic of letters. In all preceding ages, learned men were in a great measure insulated. Those of one country knew little of those of another; and if any one wished to obtain more particular information concerning the treasures of knowledge possessed by an individual, or a nation, he was under the necessity of travelling into the country with which he sought to be acquainted, and of making personal inquiry for this purpose. And even after the art of printing was discovered, the intercourse between different parts of the learned world was so small, for more than two centuries, that some of the greatest benefactors to the cause of knowledge were little known out of their own country, and some but imperfectly even within these limits.

In the eighteenth century it was remarkably otherwise. The great extension of the art of printing in this period, joined with the circumstances above stated, have brought all classes of men in the literary world better acquainted with each other, and especially those who are devoted to the improvement of letters and science. The number of literary journals in every part of Europe has greatly increased within the last fifty years, their plans have been much improved, and their circulation prodigiously extended; learned individuals and societies now maintain a more free and friendly correspondence than formerly; the great improvements in post-office establishments, within this period, have facilitated, to an unparalleled degree, the intercourse between distant parts

of the Earth*; foreigners of distinction are more frequently elected members of academies and other associations of a similar kind; commerce, as its channels became multiplied and enlarged, furnished at once a convenient medium and strong incentives to literary intercourse; the great increase in the practice of translating respectable works into all polished languages has also served to render books of value, and their authors, more generally known:—to all which may be added, that the increased frequency and extent of modern travels have been decidedly favourable to the correspondence of learned men, and to a knowledge of the works and characters of one another.

Such is an imperfect outline of the literary and scientific character of the century to which we have just bidden adieu. The picture is necessarily extensive and various; and the features, how-

* To illustrate this remark, two or three facts shall be stated with regard to a single post-office establishment. In 1728 the London post arrived one day at Edinburgh with only one sixpenny London letter, and that was addressed to the post-master-general on office business. The arrival of the post was then only once a fortnight; now it is six times a week. The post then employed ten days in travelling from London to Edinburgh; now it employs only three. Then the mail produced no revenue or nett profit to government, but was rather a continual charge; but the revenue of the post-office in Scotland, for the year ending in April 1802, was 85791*l.* 11*s.* 3*d.* A corresponding increase in commercial and literary intercourse has taken place in the same period in almost every cultivated part of the world.

ever unskilfully sketched, are presented with sufficient accuracy to show that they are striking, and worthy of more minute examination. They are not, indeed, all calculated to give pleasure to the benevolent mind: some are distorted and disgusting, and a few heavy and uninteresting; but a much greater number are at once strong, highly illuminated, and preeminently engaging. If these be mingled, as in most pictures that are drawn true to nature, it is presumed that, in the present instance, the agreeable features predominate in a greater degree than in any delineation of a former period of similar extent.

Those, therefore, who have witnessed the close of the century under review, have indeed reason to congratulate themselves as a highly favoured generation. Though they have been pained with the sight of some degrading retrocessions in human knowledge, and almost stunned with the noisy pretensions of false philosophy, they have seen, at the same time, improvements in science which their fathers a century ago would have anticipated with astonishment or pronounced altogether impossible. They have seen a larger portion of human society enlightened, polished, and comfortable, than ever before greeted the eye of benevolence. They have, in a word, witnessed, on the one hand, the accession of honours to science, which it could boast in no former period; and, on the other, a degree of usefulness reflected from science to economy and art, no less conspicuous and unrivalled. The lapse of another century such as the eighteenth—a century

that should bring with it an equal amount of discoveries and improvements, and present an equally rapid increase in the means and in the diffusion of knowledge, would confer an aspect on systems of science of which we at present are little qualified to judge. Such a century the nineteenth is likely to prove.

But let none indulge the vain dream that all darkness is about to be banished from the Earth, and that human nature is rapidly hastening to perfection. "When the philosophers of the seventeenth century were first congregated into the Royal Society, we are told that great expectations were raised of the sudden progress of useful arts. The time was supposed to be near when engines should turn by a perpetual motion, and health be secured by the universal medicine; when learning should be facilitated by a real character, and commerce extended by ships which could reach their ports in defiance of the tempest. But that time never came. The society met and parted without any visible diminution of the miseries of life. The gout and stone were still painful; the ground that was not ploughed brought forth no harvest; and neither oranges nor grapes could grow upon the hawthorn*." The same result, it may be confidently predicted, will appear at the close of the century on which we have now entered. The advocates of the *supremacy of reason* and the *perfectibility of man*, at every successive retrospect of human affairs will

* *Idler*, vol. ii, No. 88.

find themselves refuted and confounded. And though science, slowly advancing amidst the opposing hosts of prejudice, mistaken facts, and false theories, will reach far beyond its present limits, it must ever fall short of those extravagant expectations, which, founded in ignorance of human nature, and discarding the dictates of experience, cannot avoid proceeding in errour, and ending in disappointment.

Philosophers of the nineteenth century! your predecessors of the past age have bequeathed to you an immeasurable mass both of good and evil. Contemplate the labours and the progress of your fathers, and be animated in your course! Mark the mistakes of those deluded and presumptuous spirits who have misled and corrupted their species, and learn caution and wisdom from their errours! Behold how much has been done by patient inquiry, by faithful observation, by accurate experiment, and by careful analysis and induction; but how little by fanciful speculation, by the dreams of hypothesis, by vain boasting, or by waging war against Nature's God! Learn to distinguish that philosophy which is the friend of truth, the handmaid of virtue, the humble interpreter of JEHOVAH'S works, and the ornament of rational minds, from that *ignis fatuus* which shines but to deceive, and allures but to destroy. Remember that by giving yourselves up to the guidance of the latter you can gain nothing but disappointment and shame; but that the sober, diligent, and persevering pursuit of the former is the plain and only road to those discoveries, which

will yet further enrich the sciences; to those improvements, which will adorn life; to those practical arts, which will add utility to ornament; and to that substantial advancement in knowledge, which the enlightened and benevolent mind anticipates with a glow of delight.

ADDITIONAL NOTES.

Note (H), page 93.—AFTER taking much pains to ascertain the number of newspapers printed in the United States, the author is enabled to present the following list. He dares not assert that it is accurate or complete; but it is as nearly so as he could make it. It is proper to observe, however, that, as the materials which form it were collected at different times in the years 1801 and 1802, it is not improbable that some of the papers mentioned have been since discontinued, and others established. The real number may certainly, however, be considered, in the gross, as rather greater than that which is here presented.

In New Hampshire there are ten newspapers; viz. three at Portsmouth; one at Concord; one at Dover; one at Gilmantown; one at Amherst; one at Keene; one at Walpole; and one at Dartmouth. They are all published once a week.

In Massachusetts there are twenty-six newspapers; viz. five at Boston, each published twice a week; two at Salem; two at Newburyport; two at Worcester; one at Brookfield; one at Springfield; one at Northampton; one at Pittsfield; one at Dedham; one at Stockbridge; one at New Bedford; one at Haverhill; one at Leominster; three at Portland; one at Augusta; one at Castine; and one at Greenfield;—all published weekly. The four last-mentioned towns are in the province of Maine.

In Rhode Island the number of gazettes has not been ascertained. It is believed there are four; viz. two at Providence, and two at Newport, each published twice a week.

In Connecticut there are seventeen newspapers; viz. two at Hartford; two at New Haven; three at New London; two at Norwich; one at Wyndham; one at Stonington; one at Litchfield; one at Sharon; one at Danbury; one at Norwalk; one at Middletown; and one at Newfield. All these are published once a week.

In Vermont there are eight newspapers; viz. one at Bennington; one at Rutland; one at Vergennes; one at Brattleborough; two at Windsor; one at Peacham; and one at Randolph;—all published weekly. At the time when this list was communicated to the author (February 1801), three new gazettes were talked of; viz. one each at Bennington, Burlington, and St. Albans.

In New York there are thirty-eight newspapers; viz. in the city of New York thirteen, seven published daily, four twice a week, and two weekly; three in Albany, each published twice a week; one at Brooklyn; two at Newburgh; two at Poughkeepsie; two at Kingston; one at Kaatskill; three at Hudson; one at Troy; one at Lansingburgh; one at Salem; one at Waterford; one at Johnstown; one at Herkemer; one at Cooperstown; one at Whitestown; one at Rome; one at Oswego; and one at Canandarqua;—all printed weekly.

In New Jersey there are eight newspapers; viz. two at Trenton; two at Newark; one at Elizabethtown; one at Brunswick; one at Morristown; and one at Burlington. These are all printed weekly.

In Pennsylvania the number has not been accurately ascertained. It is believed, however, to be about twenty-eight. Of these five or six are published daily; about the same number twice a week; and the remainder weekly. At least five of the newspapers in Pennsylvania are in the German language.

In Delaware there are three newspapers; viz. two at Wilmington, published twice a week; and one at Dover, published weekly.

In Maryland there are fourteen newspapers; three at Baltimore, published daily; three at Washington, of which two are published three times a week, and one weekly; two at Georgetown, each printed three times a week; and one at Annapolis; one at Easton; two at Hagarstown; and two at Fredericktown;—all weekly papers.

In Virginia there are seventeen newspapers; viz. two at Alexandria, published daily; three at Richmond, each three times a week; two at Norfolk, twice a week; two at Petersburgh, twice a week; and one at Fredericksburgh, also twice a week. Beside these, there are, one at Fincastle; one at Leesburg; one at Lynchburg; one at Staunton; one at Martinsburg; and two at Winchester;—all weekly papers.

In North Carolina there are eight newspapers; viz. two at Raleigh, the seat of government; one at Edenton; one at Newbern; one at Wilmington; one at Halifax; one at Salisbury; and one at Lincolnberg;—all weekly papers.

In South Carolina the number of newspapers could not be ascertained at the time when inquiry was made. There are probably at least six or eight; perhaps a greater number.

In Georgia there are six newspapers; viz. two at Savannah, one of which is published twice a week, and the other weekly; two at Augusta, each weekly; and one weekly paper each at Louisville and at Washington.

In Kentucky there are four newspapers; viz. two at Lexington; one at Frankfort; and one at Louisville;—all weekly papers.

In Tennessee there are two newspapers; viz. one at Knoxville, and one at Nashville;—both published weekly.

In the state of Ohio there is at least one newspaper, printed at Chillicothe; and probably one or two more.

In the Mississippi territory there is one newspaper, printed weekly at the city of Natchez.

There are, then, in the United States, about 200 newspapers. Of these at least seventeen are printed daily, seven

three times a week, thirty twice a week, and one hundred and forty-six weekly.

The statement in p. 92 differs, in some respects, from that which is here given. It is believed that the latter is the more correct.

Note (I), page 103.—The following brief notices respecting the rise and progress of this institution, and its situation in 1803, are extracted from a private letter, addressed to the author by a member of the association.

"In the year 1743 a society was formed in Philadelphia, taking the name of *The American Philosophical Society.* Its most early and active members were, Benjamin Franklin, Dr. Thomas Bond, the rev. Dr. Francis Allison, the rev. John Ewing, the rev. Dr. William Smith, and Mr. David Rittenhouse.

"In the year 1766 another society was formed, under the name of *The American Society for promoting and propagating useful Knowledge in Philadelphia.* Among its most active members appear to have been Messrs. Charles Thompson, Edmund Physick, Isaac Paschall, Owen Biddle, Moses Bartram, and Isaac Bartram.

"The chief business of the former of these societies seems to have been the making and receiving of *communications* on various philosophical subjects; and of the latter, the proposing and discussing of *questions* on a great variety of subjects, chiefly philosophical and political: and among these it is impossible not to discern strong symptoms of that spirit of freedom which was soon to discover itself in the American revolution.

"In the beginning of the year 1769 these two societies united, under the name of *The American Philosophical Society, held at Philadelphia, for promoting useful Knowledge.* The elder branch, at the time of the union, contained 144 members, including 80 corresponding members; and the younger branch contained 128 members. Several gentlemen, however, were at this time members of both.

"The society was incorporated, by an act of the legislature of Pennsylvania, in the year 1780. Aided by the munificence of the state, and liberal donations of individuals, it has now erected, on a lot of ground in the State House square, a commodious and not inelegant building, where its museum and library are kept, and its meetings held.

"The society has published five quarto volumes of its Transactions. Its library, chiefly formed by the benevolent donations of similar societies both in Europe and America, and of individuals, now contains upwards of 1300 volumes. Its museum of natural history is not yet very extensive; but, however, contains a number of rare and valuable specimens, chiefly of the fossil or mineral kind. Its philosophical apparatus is still in an infant state, but progressive.

"In the year 1786 Mr. John Hyacinth de Magellan, of London, made a donation to the society of 200 guineas, to be vested in a permanent fund, to the end that the interest arising therefrom should be annually disposed of in premiums, to be adjudged by the society 'to the author of the best discovery, or most useful invention, relating to navigation, astronomy, or natural philosophy (mere natural history only excepted).' A few only of these premiums having been yet awarded, this fund is now considerably accumulated. The society have, from their own proper funds, offered premiums, and invited candidates to make communications of inventions or improvements relative to certain specified objects.

"With respect to the number of the present members of the society I cannot speak with any degree of certainty. It may, perhaps, be about two hundred, of whom about one half may be foreigners, about forty in Philadelphia and its vicinity, and the rest in all parts of the United States.

"The society, I may say with truth, is at present in a pretty flourishing condition. Its meetings are well attended, and every part of its business conducted with regularity.

This, in justice, however, is to be ascribed to the zeal and activity of a very few of its members.

"The society has no other funds than those which arise from the annual contribution of two dollars from each of its resident members, and the occasional donations of liberal individuals."

Note (K), page 104.—The following extract of a letter from a member of the academy, written in September 1801, will give the reader a comprehensive view of the history of this institution, and of its state at that time.

"The American Academy of Arts and Sciences was incorporated May 3, 1780. The first meeting was on the 30th of the same month. The late governor Bowdoin was elected president; and was annually reelected until his death, which happened November 6, 1790. In May 1791, the hon. John Adams, LL. D., was elected president, and has been annually reelected since. In the year 1785 the academy published a volume of its transactions in quarto. The preface to this volume, the incorporating act, and statutes of the academy, together with Mr. Bowdoin's inaugural address, which it contains, will give full information of the nature and objects of the society, and of its situation at that time. Though the volume is intrinsically valuable and well executed, and was offered for sale at the moderate price of sixteen shillings, yet it had a very limited sale, and the publication involved the academy in a debt which occasioned no small embarrassment. The first part of a second volume was, however, published in 1793, and a sufficient number of papers has been some time selected to complete the volume. It will soon be published.

"The present funds amount to about 7300 dollars, vested in stocks of different descriptions. Five thousand dollars of this sum arises from a donation made by count Rumford in 1796: the interest of which is, by the terms of the donation, to be 'applied and given, once every second year, as a pre-

mium to the author of the most important discovery or useful improvement which shall be made known to the public in any part of the continent of America, or in any of the American islands, during the preceding two years, on heat or on light.' The academy has voted, that at its meeting in May next, and afterwards at its meeting in May biennially, it will decide on the discovery or improvement which shall appear to be entitled to the premium. Notice will soon be published of this vote. Count Rumford's donation is in three per cent stock. The residue of the fund arises from a donation of 100*l.* given by Mr. Bowdoin in his will; the like sum given by Josiah Quincy, esq.; 440 dollars given by the general court in 1787; and an annual assessment of two dollars on each member. The sum of five dollars is also paid by each member on his admission. In addition to the pecuniary legacy, governor Bowdoin gave to the academy his library, consisting of about twelve hundred volumes, with liberty to sell any part of it, the proceeds to be vested in books. About six hundred volumes were sold under this permission. The library of the academy now contains about thirteen hundred volumes, among which are many rare and valuable books. Beside Mr. Bowdoin, the principal donors are, the present president of the academy, Dr. Franklin, and M. Veron, who was a surgeon in the squadron of M. de Ternay. The number of the original or statute members was sixty-two. One hundred and sixty-one members have been elected since the commencement of the institution. There are now living, of the whole corps, 170; viz.

Resident members, by which is meant those who belong to the commonwealth	95
Resident in other states in the union	30
Foreign members	45
Making in the whole	170

'The members meet four times annually; in January and May at Boston—in August and September at Cambridge.

Their meetings at Boston are held in an apartment lately assigned for their accommodation in the new State House, where also their library and museum are deposited. A catalogue of the books in the library is in preparation, and will soon be published. It has been sometimes remarked that this society has been in some degree languid in its operation, and has not fully satisfied the public expectations. Whatever justice there may be in such a remark, I shall not now attempt to trace the source. There is evidently a want of excitement; and the public ought to have candour enough to take part of the blame to itself. I have the satisfaction, however, to observe, that there appears, of late, a renewed and more lively attention among its members to the concerns of the institution. I ought to have mentioned, among the liberalities of the general court, the plates of the *map* of the commonwealth, which were given to the academy and to the historical society. The donation has been accepted, and a joint committee of the societies have lately sold the right of impression for seven years for 600 dollars, to be paid to the societies without any deduction.

Note (L), page 185.—The pernicious tendency of many modern German publications has been often the subject of remark within a few years past. That works of solid merit, which cannot be too generally known and read, are every year published in that country, is not denied; but that a considerable number daily issues from the German presses, of a very different and most pestiferous character, can as little be doubted. A late writer, in a memoir on this subject, makes the following striking remarks. How far they are just or otherwise is left to be determined by every reader.

"After all, it may not be chimerical to suppose that the general reception of the German writings, the universal prevalence of the German taste, and the love of the wild and gloomy, are not to be accounted for from ordinary causes, and have in them more weight and importance than are

usually attached to mere matters of taste and criticism. May not these be among the elements of feverish agitation and mighty change, afloat, by the permission of Providence, for purposes, to us inscrutable, in the moral system? May not this revolution in taste be a prelude to other revolutions—a small skirt of the cloud, *like a man's hand*, ushering in the blackening tempest? Are not the German writings calculated to generate in both sexes a ferocious hardihood and independence of mind; a dangerous contempt of established forms; a promptitude to suffer and to dare; an enthusiasm of character, fitting them for seasons of energy, of exertions, of privations, dangers, and calamities? It is natural for human blindness and inattention to overlook the instruments and operations by which Providence prepares and fashions great and surprising events. It is the folly of man to ascribe too little weight and importance to moral causes; while it is the course of Providence (as it were on purpose to humble human pride) to act by seemingly minute and inefficient causes. Who knows, then, but this preternatural appetite for the irregular, the indecorous, the boisterous, the sanguinary, and the terrific, may be the precursor of some strange moral or political convulsion?"—*Transactions of the Royal Irish Academy*, vol. viii; *Reflections on the Style and Manner of some late German Writers, and on the Tendency of their Productions*. By William Preston, esq., M. R. I. A.

Note (M), page 235.—As Dr. Samuel Seabury was the first episcopal bishop that ever resided in the United States, it is thought proper to present the following additional information respecting him, which has been communicated to the author since the account in the above mentioned page was printed.

He was born in 1728, and passed through the regular course of education in *Yale college*, where he graduated in 1751. In 1752 he went to Scotland for the purpose of studying medicine; but soon afterwards turning his attention to

divinity, he went to London, where he was ordained a deacon, Dec. 21, 1753, by the bishop of Lincoln, at the request of Dr. Thomas Sherlock, bishop of London; and a few days afterward, priest, by the bishop of Carlisle. Beside remaining in Scotland about one year, he spent two or three months at the university of Oxford.

He was first settled in the ministry at Brunswick, in New Jersey. Here he remained about three years. From Brunswick, in the beginning of the year 1757, he removed to Jamaica, on Long Island, where he resided until December 1766; thence he removed to Westchester, in the state of New York. In this place he remained until the commencement of the revolutionary war, when he went into the city of New York, and after the termination of this controversy settled in Connecticut. In 1777 he received the degree of doctor of divinity from the university of Oxford.

Dr. Seabury went to England in 1784, to obtain consecration as bishop of the episcopal church in Connecticut. Meeting, in South Britain, with some obstruction to the accomplishment of his wishes (an obstruction, however, entirely unconnected with personal considerations), he went to Scotland, where, in the month of November in that year, he was consecrated bishop, by Messrs. Robert Kilgour, Arthur Petrie, and John Skinner, nonjuring bishops of Scotland.

He continued for a number of years after this period to reside at New London, and to discharge, in an exemplary manner, the duties of his office. He was warmly attached to the episcopal church, and generally esteemed one of her most zealous and able defenders in America.—He died in 1796.

Note (N), page 236.—Among those who signalised themselves as writers in favour of the introduction and support of an American episcopate, the name of Mr. John Vardill ought not to have been omitted. Mr. Vardill was born and educated in the city of New York. In the year 1763 he was admitted into King's college, as it was then called; and having

passed, with high reputation, through the usual course of academic instruction, he received the degrees of bachelor and master of arts, and remained in the college for the purpose of prosecuting his studies preparatory to his application for orders in the episcopal church.

In the year 1773 he was elected fellow of the college and professor of natural law; and, toward the conclusion of that year, went to England for ordination, where he has since remained. In early youth he discovered a very considerable poetical genius; and several of his publications in this way, at different periods of his life, have been received with much applause. He bore a conspicuous part as a writer at the commencement of the contest between the United States and Great Britain, and in the dispute relative to the introduction and establishment of bishops of the episcopal church.

Note (O), p. 255.—The following list of American colleges has been made out with considerable care. It may perhaps be regarded as a record of some value, not only for gratifying present curiosity, but also for future reference.

In Massachusetts there are three colleges, viz.

1. *Harvard college*, or the *university of Cambridge*. This is the oldest institution of the kind in North America. It was founded in 1638.

In 1636 the general court of Massachusetts gave 400*l.* toward the support of a public school at Cambridge, then called Newtown. Mr. John Harvard, an eminent clergyman, dying in 1638, left near 800*l.*, being the greater part of his estate, to the same object. In consequence of this donation, the general court the same year enlarged the plan, and extended the powers of the institution, and gave it the name of *Harvard college*. Degrees were first conferred in the year 1642.

This institution has to acknowledge the munificence of many liberal individuals. In 1699 the hon. William Stoughton, lieutenant-governor of the province, erected a hall for

the accommodation of students, which was called by his name. *Holden chapel* was erected in 1745, at the expense of the widow and daughters of Samuel Holden, one of the directors of the bank of England. *Hollis hall*, erected in 1762, was so called in honour of Thomas Hollis, of London, who made numerous and large benefactions to the college. Beside these, the donations of Thomas Hancock, Drs. Ezekiel and Abner Hersey, William Erving, esq., and several others, were liberal, and have contributed to extend the plan and usefulness of the college. All professorships bear the names of the gentlemen who either gave a fund for their support or contributed towards this object.

The immediate officers of this college are, a president (who is at present the rev. Dr. Joseph Willard); Hollis professor of divinity; Hancock professor of the Hebrew and oriental languages; Hollis professor of mathematics and natural philosophy; Hersey professor of anatomy and surgery; Hersey professor of the theory and practice of physic; Erving professor of chemistry and materia medica; and four tutors.

The board of overseers consists of the governor, lieutenant-governor, the members of the council and senate, and the ministers of the congregational churches in Boston, Cambridge, Watertown, Charlestown, Roxbury, and Dorchester.

The number of students in this college may be estimated on an average from 180 to 200. The greater part of these board in the college. The expenses *necessarily* arising to each student within the walls, *i. e.*, boarding, tuition, room-rent, &c., may be estimated at about 120 dollars *per annum*.

The course of instruction in this college is as follows: First year, the students read Sallust, Livy, Horace, Terence, Homer, Xenophon; beside these, they attend to rhetoric, Millot's Elements of Universal History, Pike's Arithmetic, Lowth's Grammar, French and Hebrew languages, Watts's Logic, Morse's Geography, and the use of the globes. Second year, classics as before; French and Hebrew languages,

logic, geography, arithmetic, and history continued; Locke on the Understanding, Blair's Lectures, mensuration, and algebra. Third year, the classics before enumerated; French, Hebrew, history, and Locke continued; with the addition of Euclid's Elements, Enfield's Philosophy, trigonometry, conic sections, mensuration of heights and distances, navigation, English composition, and forensic disputations. Fourth year, Burlamaqui's Elements of Natural and Political Law, Paley's Philosophy, dialling, spheric geometry and trigonometry, Ferguson's Astronomy, Doddridge's Theological Lectures, English composition, &c.

The library is the largest, excepting one, in the United States. It consists of between 13000 and 14000 volumes. The philosophical apparatus is ample, and generally said to be the best in America. The funds are large, but their precise amount is not known. The annual commencement is on the last Wednesday in August. At the end of the year 1800 more than 3600 students had received the honours of the institution.

2. *Williams' college.* This institution was incorporated as a college in 1793, and is situate in Williamstown, in the county of Berkshire. It is named in honour of colonel Ephraim Williams, who died in 1755, and who left a large portion of his estate for the establishment and support of a seminary of learning. This seminary was first incorporated as an academy in 1785. Its plan was extended, and a charter, constituting it a college, given in the year beforementioned.

The college buildings are two large edifices of brick; one 82 feet long, 42 feet wide, and four stories high; containing 28 rooms for the accommodation of students, and a chapel: the other 104 feet long, 38 feet wide, and also four stories high; containing 32 rooms, with a bed-room and study adjoining to each. The former of these buildings was erected in 1788, at the expense of 11700 dollars; the latter, in 1798, at the expense of 12400 dollars. Beside these, there are a

dwelling-house for the president, and a large and elegant church, to the erection of which the trustees contributed, on condition that the officers and students of the college should always be accommodated therein on the Lord's days, and have the use of it on public occasions.

The funds of this college are small, consisting of money on interest, amounting to about 3500 dollars, and a township of land in the province of Maine, worth, perhaps, from 7000 to 10000 dollars. The income, from tuition, room-rent, &c., is about 2000 dollars annually. The institution has been hitherto supported by colonel Williams's donation, by subscriptions among the inhabitants of Williamstown and its vicinity, by the product of a lottery, and by a grant of two townships of land in the province of Maine by the legislature of the state.

The officers of this college are, a president (who is at present the rev. Dr. Ebenezer Fitch) and four tutors. The institution is governed by sixteen gentlemen, of whom the president for the time being is one, and always presides at their meetings.

The number of students at the close of the year 1800 was 93. They are boarded in the college, and in private houses in the vicinity. The price of board, tuition, washing, wood, &c., amounts annually to about 100 dollars.

The library consists of about 600 volumes. Two literary societies belonging to the college have a library in common, consisting of 300 volumes more. The philosophical apparatus is small; but well selected and good, so far as it goes. A good telescope and some other articles are much wanted to render the collection tolerably complete.

The course of instruction is nearly similar to that which was detailed as taking place in *Harvard College*. The principal points of difference are the following:—There appears to be rather less attention paid to classic literature here than at Harvard. Priestley's Lectures on History are studied, by the junior class, instead of Millot's Elements; Edwards on the

Will, by the senior class, in addition to Locke; and in some instances the senior class has recited Dr. Hopkins's System of Theology; in others Doddridge's Lectures.

The annual commencement is on the first Wednesday of September; and at the close of the year 1800 about 80 students had received the honours of the college.

3. *Bowdoin college.* This college was instituted in 1794. It is situate at Brunswick, in the province of Maine; and was so called in honour of the late governor Bowdoin.

This institution is yet in its infancy. There are a president (who is the rev. Joseph M'Kean), lately appointed, and a professor of languages. With respect to the state of the funds, the number of the students, the course of instruction, &c., no information has been obtained. But as the college has not been organised more than three or four years, its constitution cannot yet be very complete or mature.

In New Hampshire there is one college, viz.

Dartmouth college, which was incorporated in 1769. This seminary is situate in Hanover, in the county of Grafton, and derives its name from the earl of Dartmouth, one of its principal benefactors. The rev. Dr. Eleazar Wheelock was the founder, and the first president. (See p. 241.) The first college buildings were erected in 1770, and a large addition made to them in 1786.

The government of the college is in the hands of twelve trustees, seven of whom make a quorum. By them all laws and appointments are made, and to them the officers are responsible.

The officers are, a president (who is at present John Wheelock, LL. D., the son of the first president); a professor of mathematics and natural philosophy; a professor of the Latin and Greek languages; a professor of chemistry and medicine; and two tutors.

The course of instruction. Students must be qualified for admission by a knowledge of the Greek Testament, of Virgil,

and Cicero's Orations, and of the principles of arithmetic; and when admitted, usually continue four years before they receive degrees. The freshman class attend to the Greek and Latin authors, the principles of composition, criticism, rhetoric, &c. The sophomore class to geography, logic, and the mathematics. The junior class to natural philosophy, moral philosophy, and the higher branches of the mathematics: the sophomores and juniors both continuing to devote a portion of their time to the classics. The senior class attend to metaphysics, the principles of civil law, divinity, chemistry, and natural history.

The funds of this college consist chiefly of lands granted by New Hampshire and Vermont, most of which are still unproductive. Of these lands there are about 40000 acres.

The college library consists of about 3000 volumes. The philosophical apparatus is sufficient for a common course of experimental philosophy.

The number of students in 1801 was 140. The greater part of these are accommodated in the college. The annual expense of each individual, including boarding, tuition, &c., except clothing and other contingencies, is about 100 dollars.

In 1801 *eight hundred students* had graduated at this college since its establishment.

In Rhode Island there is one college, viz.

Rhode Island college. The charter for this seminary was obtained in 1764. The rev. James Manning, of New Jersey, had the principal agency in founding it, and was chosen the first president. The college edifice was erected in 1770. It is a spacious building, 150 feet long, 46 feet wide, and four stories high, and contains 56 apartments.

The government of the college is vested in a board of trustees. The immediate officers are, a president, professor of mathematics and natural philosophy, professor of law, and three tutors.

The funds of this institution are small, amounting to little more than 8000 dollars, chiefly raised by subscription.

The philosophical apparatus is tolerably complete. It has lately received considerable accessions by the liberality of Samuel Elam, esq., of New Port. The library contains about 3000 volumes.

The number of students in 1801 was 107. They are chiefly boarded in the college; and the necessary annual expense of each is about 100 dollars.

There is by no means a general taste for literature in this state. Of the 107 students above mentioned only 12 belonged to the state. The greater part of the rest were from Massachusetts, and a number from the southward, especially from South Carolina.

In Connecticut there is one college, viz.

Yale college, at New Haven. This institution was incorporated in 1701, and was the third college established in the American colonies. It received this name in honour of Thomas Yale, esq., who had been governor of Fort St. George, in India, and who was one of its liberal benefactors.

The officers of this college are, a president (now the rev. Dr. Timothy Dwight); a professor of divinity; professor of mathematics and natural philosophy; professor of Oriental languages; and three tutors.

The number of students in this college is believed to be greater than in any other in the United States. In 1801 they amounted to 217; and the number since that time has probably increased. The students are chiefly boarded in the college, and the annual expense attending the accommodation of each is from 120 to 150 dollars.

The college buildings are spacious and elegant. The library consists of between 3000 and 4000 volumes. The philosophical apparatus is considered among the best in America. The funds are large, but the amount of them is not known to the writer.

The annual commencement is on the second Wednesday of September; and the number of students who had graduated at this college, at the end of the year 1800, was about 2600.

The state of Vermont has one college, viz.

Middlebury college, situate in the town of Middlebury, in Addison county. This seminary was founded in 1800, and is yet in an infant state.

The government of this college is vested in a board of trustees, consisting of sixteen gentlemen. The officers in 1801 were, a president (the rev. Mr. J. Atwater); and a tutor. One or more professors have probably been elected since.

The funds consist chiefly of lands, which, though little productive at present, promise hereafter to afford an ample support to the institution.

The number of students in the college, and grammar-school annexed to it, was, in 1801, about 30. Since that time it is believed they have increased. They are all boarded in private houses. The annual expense of each, including boarding, washing, tuition, &c., is from 80 to 90 dollars.

The library is small, but increasing. The philosophical apparatus is incomplete; but measures have been adopted to render it less so; and, on the whole, the institution has a prospect of becoming, at no great distance of time, extensively useful.

New York has two colleges, viz.

1. *Columbia college*, in the city of New York. This institution was founded in 1754, under the title of *King's college*, which name, after the revolution, was exchanged for the one which it now bears. (See p. 218 of this volume.)

This college is under the direction of a board of trustees. The immediate officers are, a president (at present the rev. Dr. Benjamin Moore, bishop of the protestant episcopal church in the state of New York); a professor of moral philosophy, logic, rhetoric, and belles lettres; a professor of the

Greek and Latin languages, and of Grecian and Roman antiquities; a professor of mathematics, natural philosophy, chronology, and geography; and a professor of chemistry. Beside these, there are in the medical school attached to the college, a dean of faculty; a professor of anatomy and surgery; a professor of the institutes of medicine; a professor of obstetrics; and a professor of materia medica and botany.

To qualify students for admission into this college, it is necessary that they should be able to read the four Gospels in Greek, together with four books of Virgil's Æneid, four books of Cæsar's Commentaries, and four orations of Cicero against Catiline.

The course of instruction in this college is as follows:

The first year, Sallust, Livy, two books of Virgil's Georgics, part of the New Testament in Greek, from twenty to thirty dialogues of Lucian, and two books (generally) of Xenophon. To these are added arithmetic, algebra, a small portion of Euclid, and Latin composition.

The second year, Virgil's Georgics finished, Horace's Odes, and part of his Satires, the Orations of Demosthenes, an additional portion of Xenophon, and two books of Homer. With these are mingled, English grammar, six books of Euclid, modern geography, trigonometry, with its various applications to surveying, navigation, &c., Latin and English composition.

The third year, Horace's Epistles, and Art of Poetry, six books of Homer, conic sections, spheric trigonometry, with its application to astronomical problems, ancient geography, rhetoric, and English composition.

The fourth year, natural philosophy, logic, and moral philosophy, Terence, Longinus, chemistry, and English composition. Public speaking once a week through the whole course.

It is believed that there is no other college in the United States, in which the Greek and Latin languages are studied with so much care, and to such an extent, as in this institution.

This college has a library, consisting of about 3000 volumes. Its philosophical apparatus is among the best in the United States. The number of matriculated students is about 125. Beside these, there are the students in the medical school, and some others, who sustain a less formal connexion with the institution.

2. *Union College*, at Schenectady. This college was founded in 1795, and though its growth has not been very rapid, it bids fair to be a useful institution.

The college officers are, a president (now the rev. Dr. Maxcey); a professor of mathematics and natural philosophy; and two tutors.

The number of students in 1801 was about 43. They were at that time boarded in private families; but are now accommodated in the college edifice, which is spacious and convenient.

The library consists of 800 volumes. The philosophical apparatus is a respectably large and good one. The funds of the institution are small.

The state of New Jersey has one college, viz.

Nassau Hall, or the *college of New Jersey*, at Princeton. This college was founded in 1746, at Elizabethtown, from which place it was removed in 1747 to New Ark, and in 1757 to Princeton, where it has since continued. About this time the large college edifice was erected, 180 feet long, 54 feet wide, and four stories high; capable of accommodating a large number of students. (See chapter xxvi, p. 204, of this work.)

This building, together with the library, much of the philosophical apparatus, &c., was destroyed by fire in the beginning of the year 1802. Since that time, however, by the aid of liberal benefactions from every part of the United States, it has been rebuilt, and the whole institution placed under new advantages and regulations, which promise a degree of respectability and usefulness greater than it had ever before attained.

The government of this college is vested in twenty four trustees, including the president of the college, and the governor of the state for the time being. The officers of the college are, a president (the rev. Dr. Samuel S. Smith); a professor of languages; a professor of divinity; a professor of mathematics, natural philosophy, and chemistry; and three tutors.

The library is now small; but measures have been lately taken, which will probably soon render it one of the largest and best college libraries in the United States. The philosophical apparatus is a respectable one, and also likely to be improved.

The course of instruction in this seminary is not accurately known to the writer. It is believed, however, that this is one of the institutions in the United States in which classical learning receives more than usual attention; and in which, beside an advantageous mode of pursuing most of the objects of study, polite literature is cultivated with great success.

The number of students in this college, at the close of the year 1803, amounted to about 150; a greater number than ever before belonged to the institution. They are chiefly boarded in the college edifice. The annual expense of each is not certainly known, but is believed to be from 150 to 170 dollars.

The annual commencement in this college is on the last Wednesday of September.

In Pennsylvania there are three colleges, viz.

1. The *University of Pennsylvania*, in Philadelphia. This institution was formed in 1791, by the union of the *College of Philadelphia*, founded in 1753, (see page 213) and another institution, formed immediately after the revolutionary war, under the same title which the united seminaries now bear.

The officers of this institution are, a provost (this place is now vacant), who is also professor of natural philosophy; a viceprovost, who is also professor of logic and moral philo-

sophy; a professor of Greek and Latin languages; a professor of mathematics; a professor of English and belles lettres; and a professor of Oriental literature. Beside these, the instructors in the medical school are, a professor of anatomy; a professor of the institutes and practice of medicine; a professor of materia medica, natural history, and botany; and a professor of chemistry. This medical school is much more frequented by students than any other in the United States. (See vol. ii, p. 18, and vol. iii, p. 265.)

The library of this seminary consists of about 1000 volumes. The philosophical apparatus is tolerably good. The whole number of students belonging to the institution, at the close of the year 1803, was about 160; but of these only a small portion actually belonged to the classes in college.

2. *Dickinson college*, in Carlisle. This college was founded in the year 1783, and received the name which it bears in honour of John Dickinson, esquire, the celebrated political writer, and its most liberal benefactor. (See page 251).

The government of this college is in the hands of a board of trustees. The officers are, a president (now the rev. Dr. Nisbet); vicepresident; and two professors. The library consists of about 3000 volumes. The philosophical apparatus is small. The amount of the funds is not known to the writer.

The number of students in this college is believed to be about 45 or 50. They are boarded in private families in the town.

3. *Franklin college*, in Lancaster. This institution was founded in 1787, for the particular accommodation of the German inhabitants of Pennsylvania, to enable them to educate their youth in their own language, and in conformity with their own habits. The principal is a German Lutheran, and the vicepresident a Calvinist. Its present state is not known to the writer; but it is believed not to be in a very flourishing condition.

In Maryland there are four colleges, viz.

1. *St. John's college*, at Annapolis. This college was founded in the year 1784; and, together with the seminary which will be next mentioned, forms the "university of Maryland."

This college is governed by twenty four trustees. Its officers are, a president (now John M'Dowell, esq.); a vice-president; and three professors. Its funds are chiefly derived from voluntary subscription, and an annual grant of 1750*l.* from the state, aided by the income from the students for tuition. Its library is moderately large; and its philosophical apparatus only tolerably good.

In 1801 the number of students in this institution was about 100.

2. *Washington college*, in Chestertown, instituted in 1782, and, like the preceding, placed under the direction of twenty four visitors or trustees. In 1787 a permanent fund was granted to this institution, by a law of the state, of 1250*l.* a year; which has been since continued. No other particulars concerning this college are known.

3. The *Catholic college*, at Georgetown, on the Potowmac. This institution is under the particular direction of the Roman catholics, who form a considerable part of the population of Maryland. The writer has not been so happy as to succeed in his attempts to obtain particular information concerning this seminary.

4. *Cokesbury college*, at Abingdon, in Harford county. This college was founded by the methodist church in 1785, and intended for the education of youth belonging to that communion. It is so called in honour of the rev. Thomas Coke, and the rev. Francis Asbury, bishops of the methodist episcopal church. No particulars are known to the writer respecting the officers, funds, number of students, &c.

In Virginia there are two colleges, viz.

1. *William and Mary College*, at Williamsburgh. This in-

stitution was incorporated in 1693, by king William and queen Mary, whose names it bears. The credit of obtaining the charter, and of organising the establishment, is due to the rev. James Blair (See p. 192). This was the second college founded in the American colonies.

The governing powers in this college are vested in a board of visitors, not exceeding twenty. The officers are, a president (now the rev. Dr. Madison, bishop of the protestant episcopal church in the state of Virginia), who is also professor of moral and natural philosophy; a professor of mathematics; a professor of ancient languages; a professor of modern languages; a professor of law; and a professor of chemistry.

In the moral school, in this college, the course consists of, 1. Logic and the philosophy of the human mind. On these subjects, the works of Duncan, Reid, and professor Stewart are studied. 2. Rhetoric and belles lettres. Here Dr. Blair's lectures are chiefly used. 3. Moral philosophy. In this department the author studied is Paley. 4. Natural law. Rutherforth and Burlamaqui, &c. 5. Law of nations. Vattel and Martens. 6. Politics. Locke, Montesquieu, Rousseau, &c. 7. Political economy. Smith's Wealth of Nations. In natural philosophy there is a regular course of lectures, attended with every necessary experiment. In this course, the works generally referred to, and recommended, are those of Rowning, Helsham, Martin, Desaguliers, Muschenbroeck, Cavallo, Adams, Lavoisier, Chaptal, &c.

In the department of law, the professor takes an extensive view of the general principles of government; comments on the great work of judge Blackstone; explains the structure and principles of the American governments, and particularly of the government of Virginia. In teaching the ancient and modern languages, the usual course is pursued. Though all the students are not compelled to attend to the former, yet a competent knowledge of them is necessary in order to the taking of a regular degree.

No particular period of residence at this college is required;

All students who are prepared to go through the prescribed examination may receive its honours.

The number of students in this college, in the beginning of the year 1801, was 53. The library contains about 3000 volumes. The philosophical apparatus, when procured in 1768, was well chosen, and tolerably complete. It cost, at that time, between 2000 and 3000 dollars. Having been in constant use for more than 30 years, it stands in need of repairs, and is less complete than at first.

The funds of this college were much diminished by the revolution. They now amount to about 4500 dollars *per annum*—derived from the rents of certain lands; a certain proportion of surveyor's fees; and the interest of money lent.

There is probably no college in the United States in which political science is studied with so much ardour, and in which it is considered so preeminently a favourite object, as in this.

2. *Hampden Sidney college,* in Prince Edward county. This seminary was founded about the year 1774, chiefly by the exertions of the rev. Samuel S. Smith, now president of the college of New Jersey.

This college has scarcely any funds. The philosophical apparatus is small. Its library consists of about 500 volumes. The number of students may be estimated in general at about 60 or 70.

North Carolina has one college, viz.

The *University of North Carolina,* at Chapel Hill, Orange county. This institution was incorporated in 1789; and the legislature of the state, by subsequent acts, made large grants for its support. The college buildings were erected in 1794; and tuition, it is believed, was commenced in 1795.

The funds of the university of North Carolina are large. They consist of 14777*l.* in cash, public stock and bonds; of

all the property in the state which is or shall hereafter be escheated; of 94000 acres of land, in different parts of the state; and of other real property to a considerable amount.

No other particulars concerning this institution are known to the writer.

South Carolina has four colleges, viz.

1. *Winnesborough college*, at Winnesborough, in Fairfield county. This institution was founded about the year 1795. It is yet in an infant state; the funds, number of students, &c., being small.

2. A college in the city of Charleston. This was instituted about the same time with the preceding; but has not yet attained any great degree of respectability. The trustees have, in a few instances, conferred the degree of bachelor of arts; but have not, it is believed, attempted to bestow literary honours of a higher rank.

3. A college at Cambridge, in the district of Ninety-six. This was incorporated at the same time with the two last mentioned seminaries; but it has dwindled into an unimportant school.

4. A college at Beaufort, also incorporated about the year 1795. This institution has yet been scarcely organised; but agreeable anticipations are formed of its respectability and usefulness.

The reason why no college in this state has risen to much respectability is, that the legislature, instead of directing their aid and patronage to one, which, under these circumstances, might have flourished, have divided their attentions and grants among several. The consequences have been very unfriendly to the progress of literature.

Georgia has one college, viz.

The *University of Georgia*, founded in 1785. This institution is not yet fully organised. Liberal provision has been

made by the state for its support; and when the buildings and other arrangements shall be completed, it bids fair to be an extensively useful seminary.

Kentucky has one college, viz.

The *Transylvania college, or university,* at Lexington. This seminary was founded by the union of two academies in December 1798, and styled by the act of union the Transylvania university.

The government of this institution is vested in a board of trustees. The officers are, a president (at present the rev. Mr. Moore), who is also professor of logic, metaphysics, moral philosophy, and belles lettres; a professor of mathematics, natural philosophy, astronomy, and geography; a professor of the Greek and Latin languages; a professor of law; a professor of medicine and surgery; and a professor of chemistry.

The funds of this university consist chiefly of lands, and may be considered as amounting to 179000 dollars. The library consists of more than 1300 volumes; beside a law library, and a medical library, for the students of law and medicine. The philosophical apparatus is respectable, and measures have been taken to render it still more so.

The number of students at this seminary, in 1801, was about 70. Of these 19 were students of law, and six of medicine. The annual expense of boarding, tuition, &c., is from 80 to 100 dollars.

Tennessee has one college, viz.

Greenville college, founded in the year 1794. The funds of this institution are very small. It has a library, consisting of 2000 volumes; a good philosophical apparatus, and about 20 students.

The officers of the college are, a president (at present the rev. Hezekiah Balch), and one other professor.

Note (P), page 294.—It is well known, that the ancients,

being ignorant of the art of printing, were obliged to employ public rehearsals as the best means of making known new compositions. In early times this was the case with writers of the first class. Herodotus recited his history, in different portions, at the Olympic games; and other writers of great reputation did the same.

Tacitus speaks in the following language of the author, who is obliged to employ this method of publishing his works. ——"Cùm toto anno, per omnes dies, magnâ noctium parte, unum librum extudit et elucubravit, rogare ultro et ambire cogatur, ut sint, qui dignentur audire: et ne id quidem gratis: nam et domum mutuatur, et auditorium extruit, et subsellia conducit, et libellos dispergit: et ut beatissimus recitationem ejus eventus prosequatur, omnis illa laus intra unum aut alterum diem, velut in herbâ vel flore præcepta, ad nullam certam et solidam pervenit frugem: nec aut amicitiam inde refert, aut clientelam aut mansurum in animo cujusquam beneficium, sed clamorem vagum, et voces inanes, et gaudium volucre."—*C. Cornelii Taciti Dial. de Oratoribus*, ix.

Pliny, in one of his Letters, gives a lively description of the disadvantages which authors had to encounter in this mode of publishing their compositions.

"Magnum proventum poetarum annus hic attulit. Toto mense Aprili nullus fere dies, quo non recitaret aliquis. Tametsi ad audiendum pigrè coitur. Plerique in stationibus sedent, tempusque audiendi fabulis conterunt, ac subinde sibi nunciari jubent, an jam recitator intraverit, an dixerit præfationem, an ex magnâ parte evolverit librum? Tum demum, ac tunc quoque lentè, cunctanterque veniunt, nec tamen remanent, sed ante finem recedunt; alii dissimulanter, ac furtim; alii simpliciter, ac liberè. Sed tanto magis laudandi probandique sunt, quos a scribendi recitandique studio hæc auditorum vel desidia, vel superbia non retardat. Equidem prope nemini defui: his ex causis longius, quam destinaveram, tempus in urbe consumpsi. Possum jam repetere secessum, et scribere aliquid, quod non recitem; ne videar, quorum re-

citationibus affui, non auditor fuisse, sed creditor. Nam, ut in cæteris rebus, ita in audiendi officio, perit gratia, si reposcatur."—*Plin. lib. i, Ep.* 13.

The poets, who could not obtain an audience otherwise, frequented the baths, and other public places, in order to fasten on their friends, and procure an opportunity of reciting their compositions. Juvenal tells us, that the groves and marble columns of *Julius Fronto* resounded with the vociferations of the reciting poets.

Frontonis platani, convulsaque marmora clamant
Semper, et assiduo ruptæ lectore columnæ.
Expectes eadem a summo, minimoque poëtâ.
Sat. i, ver. 12.

The same satirist suggests, that the poet who wished his works to become known, might borrow a house for the purpose of public reading; and that the person who accommodated the writer, might place his friends and freedmen on the back seats, with directions to be liberal in their applause.

——— Et si dulcedine famæ
Succensus recites, Maculonus commodat ædes.
Scit dare libertos extremâ in parte sedentes
Ordinis, et magnas comitum disponere voces.
Nemo dabit regum, quanti subsellia constent.
Sat. vii, ver. 39.

In another place, speaking of Statius, a popular poet, he says:

Curritur ad vocem jucundam, et carmen amicæ
Thebaidos, lætam fecit cum Statius urbem,
Promisitque diem; tantâ dulcedine captos
Afficit ille animos, tantaque libidine vulgi

Auditur; sed cum fregit subsellia versu,
Esurit, intactam Paridi nisi vendat Agaven.
Sat. vii, ver. 82.

From a passage in Horace it would seem that in his day writers of the first class disdained to employ this method of obtaining literary fame.

Non recito cuiquam, nisi amicis, idque coactus;
Non ubivis, coramve quibuslibet. In medio qui
Scripta foro recitent, sunt multi; quique lavantes;
Suave locus voci resonat conclusus. Inanes
Hoc juvat, haud illud quærentes, num sine sensu,
Tempore num faciant alieno.
Sat. lib. i, Sat. iv, ver. 73.

Note (2), page 295.—The following remarks of professor Stewart, on the probable influence of printing upon the future interests of society, are worthy of attention. Whatever may be thought of the truth or falsehood of the opinions which they express, they afford to the contemplative mind materials for very interesting reflections.

"The influence which printing is likely to have on the future history of the world has not, I think, been hitherto examined, by philosophers, with the attention which the importance of the subject deserves. One reason for this may probably have been, that, as the invention has never been made but once, it has been considered rather as the effect of a fortunate accident, than as the result of those general causes on which the progress of society seems to depend. But it may be reasonably questioned, how far this idea be just: for, although it should be allowed that the invention of printing was accidental, with respect to the individual who made it, it may with truth be considered as the natural result of a state of the world, when a number of great and contiguous nations

are all engaged in the study of literature, in the pursuit of science, and in the practice of the arts: insomuch, that I do not think it extravagant to affirm, that, if this invention had not been made by the particular person to whom it is ascribed, the same art or some analogous art, answering a similar purpose, would have infallibly been invented by some other person, and at no very distant period. The art of printing, therefore, is entitled to be considered as a step in the natural history of man, no less than the art of writing; and they who are sceptical about the future progress of the race, merely in consequence of its past history, reason as unphilosophically as the member of a savage tribe, who, deriving his own acquaintance with former times from oral tradition only, should affect to call in question the efficacy of written records, in accelerating the progress of knowledge and of civilisation.

"What will be the particular effects of this invention (which has been, hitherto, much checked in its operation, by the restraints on the liberty of the press in the greater part of Europe) it is beyond the reach of human sagacity to conjecture; but, in general, we may venture to predict with confidence, that, in every country, it will gradually operate to widen the circle of science and civilisation; to distribute more equally, among all the members of the community, the advantages of the political union, and to enlarge the basis of equitable governments, by increasing the number of those who understand their value, and are interested to defend them. The science of legislation, too, with all the other branches of knowledge which are connected with human improvement, may be expected to advance with rapidity; and, in proportion as the opinions and institutions of men approach to truth and to justice, they will be secured against those revolutions to which human affairs have always been hitherto subject. '*Opinionum enim commenta delet dies, naturæ judicia confirmat.*'

"Nor must we omit to mention the value which the art of printing communicates to the most limited exertions of literary

industry, by treasuring them up as materials for the future examination of more enlightened inquirers. In this respect the press bestows upon the sciences an advantage somewhat analogous to that which the mechanical arts derive from the division of labour. As in these arts the exertions of an uninformed multitude are united by the comprehensive skill of the artist, in the accomplishment of effects astonishing by their magnitude, and by the complicated ingenuity they display; so, in the sciences, the observations and conjectures of obscure individuals on those subjects which are level to their capacities, and which fall under their own immediate notice, accumulate for a course of years; till at last some philosopher arises, who combines these scattered materials, and exhibits, in his system, not merely the force of a single mind, but the intellectual power of the age in which he lives."—*Elements of the Philosophy of the Human Mind*, chap. iv, sect. 8.

I agree with the professor in thinking, that "the influence which printing is likely to have on the future history of the world has not been examined, by philosophers, with that attention which the importance of the subject deserves." But he has only presented the fair side of the picture. Experience proves, that this precious art is not devoted to laudable purposes alone; and that in estimating its future influence on human happiness, we must take into the account the abuses to which it is liable, as well as the advantages which it tends to produce.

INDEX OF NAMES.

A.

Abbot, i 181
Abel, J., ii 151
Abelard, P., ii 420
Abernethy, i 374
Abul Fazel, ii 271 note
Acerbi, iii 6 note
Achard, i 134, 421; ii 100
Acharius, i 180
Achenwall, professor, ii 356; iii 175
Acosta, d', i 198
Acquaviva, duke of Alti, iii 109, 110
Adair, James, ii 56, 325
Adams, ii 66, 67
——— Alex., ii 404
——— G., i 31, 385; iii 348
——— J., iii 104, 242 note, 247, 250 note, 270, 330
——— S., iii 247
Adanson, i 160, 179, 182, 276 note; ii 51
Addison, Joseph, ii 295, ib. note, 296, 297, 298, 303, 306; iii 21, 41, 47, 60, 61, 84, ib. note, 85, ib. note, 86, 89 note, 170, 207 note
Adelung, J. C., ii 195 note, 202, 317, 318; iii 169
Adet, i 112, 134
Adler, i 251
Æpinus, i 29, 30 note, 31, 37, 253, 388; ii 76; iii 161
Æschylus, ii 236, 239
Agrell, ii 48
Aikin, Dr. J., i 318 note; ii 5, 8, 363; iii 124
Aitken, Rob., iii 258, ib. note
Akber, ii 271 note
Akenside, Dr. Mark, iii 15
Alanson, i 375
Albinus, i 147, 265, 271, 272, 273
Aldini, prof., i 394
Alembert, d', i 41, 47, 51, 64, 73, 74, 260; ii 73, 74, 147 note, 148, 363; iii 111
Alessandri, ii 151
Alexander, W., iii 261, ib. note
Alfieri, ii 314; iii 53
Algardi, ii 140, ib. note
Allamand, i 25
Allen, jus., iii 214 note
Allioni, i 182
Allison, ii 215

Allison, Dr. Francis, iii 201, ib. note, 203, 204 note, 214, 239 note, 269 note, 328
Alstedius, iii 110
Alston, i 170, 172, 179, 181; ii 3, 5
Ambodick, iii 162
Amiot, ii 240, 284
Amman, i 365
Amontons, i 45, 67
Amory, T., ii 388 note
Anacreon, ii 236, 239
Anitschkof, iii 162
Anderson, i 53, 197
——— Dr. (of New York), ii 146
——— —— Jas., ii 103, 105
——— (engraver), ii 145
Andrews, J., ii 347
Annan, iii 200
Anne, empress of Russia, ii 157
Anquetil, *see* Perron
Anson, lord, i 359; ii 32, ib. note
Anspach, marg. of, *see* Craven, lady
Antheaume, i 397
Anthony, Jos., ii 134 note
Antoni, d', i 43
Anville, J. B. d', ii 60, ib. note, 61, 277
Apligny, d', ii 121
Apollonius of Alexandria, ii 331
Apthorp, East, iii 235, ib. note
Aquapendente, *see* Fabricius
Aratus, iii 315 note
Arblay, Mrs. d', ii 381, 382; iii 132
Arbogast, ii 73
Arcy, d', i 44
Arduino, i 236
Argand, ii 123
Argenville, d', i 197
Aristophanes, ii 236
Aristotle, i 168, 188; ii 157, 180, 195, 236, 238, 240, 334, 335, 371 note
Arkwright, sir R., ii 111, ib. note
Armateur, ii 59
Armstrong, Dr. J., iii 15
Arne, Dr. S. A., ii 151; iii 47
Arnold, i 83; ii 123 note
——— Dr., ii 151
Arnould, An., ii 171
Arquier, d', i 405
Arrowsmith, ii 61, 62
Artedi, i 155, ib. note, 276 note
Asbury, Fran., iii 347
Ascham, Rog., iii 129 note
Asellius, i 263
Ash, Dr., i 389
—— —— J., ii 306, 309
Atwater, J., iii 342
Aublet, i 184
Audran, ii 146
Auger, ii 236
Aulus Gellius, ii 237, 239
Austin, i 124
Auteroche, d', ii 45, 56, ib. note
Avicenna, ii 109
Avison, C., ii 151
Ayala, don Juan d', ii 33
Ayscough, ii 403
Azyr, Vicq-d', i 273, 276, 306

B.
Babo, iii 55, 178
Bach, ii 151
Bachelier, ii 136
Bacherach, iii 163
Bacon, ii 140
——— lord, i 118, 259, 312; ii 176, 182, 365; iii 99, 121, 288, 292, 299 note
Baczko, ii 350
Baglivi, i 329, 350
Bailey, Nath., ii 307
Baillie, Dr., i 274
——— miss Jo., iii 43
Bailly, i 89, 216, 235, 240 note; ii 358
Baker, G., ii 239
——— H., i 67, 276 note, 366
Balch, Hezekiah, iii 351
Bancroft, Dr. E., i 63, ib. note, 121; ii 59, 121, ib. note
Banister, J., i 182, ib. note
Banks, ii 140
——— sir Jos., i 160, 186; ii 33, 36 note
Barbauld, Mrs., iii 35, 124, 131
Barbinais, ii 30
Barclay, Dr. H., iii 218, ib. note
Bard, Dr. S., ii 19, 20, 21
Baretti, iii 297 note
Barker, ii 62
——— Chr., iii 88
——— Dr., i 50; ii 114
Barlow, Joel, iii 68
Barnes, Josh., ii 236, 237 note
Barres, du, ii 62
Barrow, ii 48, 176
Baruel, abbé, ii 358
Barry, Dr., i 358 note
——— J., ii 134
Barthelemi, J. J., ii 357 note, 358, ib. note
Barthez, P. J., i 324 note
Bartholin, iii 74
Bartholine, Tho., i 263, 265
Bartholomeo, ii 44
Bartholon, i 384; ii 97
Bartolozzi, ii 144, 146
Barton, professor, i 143 note, 149, 154, 161, 170 note, 177, 184, ib. note, 425, 426, 427; ii 5, ib. note, 24, 326, 327 note, 403; iii 188 note, 264
Bartram, I., iii 328
——— J., i 184, 426, 429; iii 232, ib. note, 277 note
——— Moses, iii 328
——— W., i 161, 184, 426; ii 50; iii 277 note
Basedow, iii 118, ib. note, 124
Basnage, iii 74
Bastamente, don, ii 40
Baster, i 276 note
Bate, Jul., ii 245, 250
Bathurst, lord, iii 14 note
Batsch, professor, i 179
Battie, ii 236,
Battoni, ii 130
Baudelocque, i 377
Bauman, iii 175
Baxter, And., ii 212
——— W., ii 236
Bayen, i 109
Bayer, Theoph. S., ii 269, 282, ib. note
Bayle, P., ii 362, 367, 371; iii 74, 110
Bayley, Dr. R., ii 21

Bayly, ii 249, 276
Baynton, i 374
Beach, iii 235, ib. note
Beattie, Dr. James, ii 175, 183 note, 184, 195, 205, 301, 330, 337, 370 note, 374, 404; iii 17, 24 note, 34
Beaumarchais, iii 51, ib. note
Beaume, i 134; ii 120
Beaumont, de, iii 124
Beausobre, ii 215
Beauvarlet, ii 146
Beauvois, de, i 179
Beauzee, ii 337
Beccaria, marq. Cæs., ii 314
——— prof. J. B., i 28, 121, 246, 253, 384; ii 150 note
Becher, i 95, ib. note, 105, 188,
Beck, C. D., ii 350; iii 175
—— prof., ii 202
Beddoes, Dr. T., i 286, ib. note, 290, 350, 365; ii 8, 333 note, 336 note
Bedford, duke of, ii 105
Beechy, ii 134
Beeckman, ii 46
Behring, capt., ii 28, 29, ib. note 66
Beighton, i 51, 56; ii 113
Belidor, i 49, 50, 51; ii 114
Belknap, rev. Dr., i 162 note; ii 58, 352, 353 note, 363, ib. note; iii 104, ib. note
Bell, A., i 273
—— B., i 371, 373, 374
—— C., i 271
—— J., i 271, 374
——— of Auchterlony, ii 43, 45
Bellin, ii 62
Bellini, i 279, 315, 318
Belloy, du, iii 43 note
Beloe, W., ii 238, 240
Belsham, T., ii 192 note, 205, 213 note
——— W., ii 347
Bembo, card. P., ii 314
Bendi, ii 240, iii 13
Bennet, rev. A., i 30
Bennett, rev. J., iii 132
Bentley, Dr. R., ii 236, 237, ib. note; iii 196 note
——— J., ii 276
——— (potter), ii 141
Benzelius, ii 350
Beresford, Jas., ii 239
Bergius, ii 3
Bergman, Torbern, i 98, ib. note, 99, 102, 103, 105, 109, 112, 118, 124, 126, 191, 192, 196, 197, 198, 201, 234, 254, 256; ii 3, 95
Berkeley, bishop, i 61, 62; ii 172, 173, 174, 176, 177, 180, 185 note, 200, 214, 215; iii 209, ib. note
Berkenhout, i 181, 186 note, 198
Berkley, Dr., iii 85
Bernier, i 89
Bernouilli, D., i 41, 43, 47, 48, 51; ii 74; iii 155
——— J., i 44, 50, 51; ii 74, 114
——— N., iii 154
Berquin, iii 124
Berthollet, i 63, 111, 121, 124, 134, 421; ii 120, 121
Berthoud, i 83; ii 32
Bertier, ii 151
Bertrand, L., i 231, ib. note

Bertrand, P., i 228, ib. note
Bettinelli, iii 53
Beverley, ii 352; iii 225
Bewick, T., ii 145
Bewley, i 103
Bezout, ii 74
Bianchini, i 89
Biddle, Owen, iii 328
Bidlake, J., iii 32
Bidloo, i 264
Bielfield, baron, iii 112
Biester, Dr., i 407
Billings, commodore, ii 41
Bion, ii 239
Bird, i 86
Bisset, Dr., ii 388
Black, Dr., i 53, 97, 98, 102, 110, 115, 118, 124, 133, 198, 199, 245, 255, 256, 267 note, 295, 296, 401, 419; ii 120
Blacklock, Dr., iii 21
Blackmore, sir R., iii 196 note
Blackstone (botan.), i 181
——— sir W., iii 348
Blackwell, Elizabeth, i 427
Bladen, Mar., ii 239
Bladh, i 254
Blagden, Dr., i 253
Blair, i 170
—— Dr. J., iii 14 note
—— prof. H., ii 283 note, 301, 330; iii 14 note, 59 note, 63 note, 337, 348
—— —— Rob., i 65
—— rev. Jas., iii 192, ib. note, 193 note, 348
—— —— Rob., iii 16
—— S., iii 201, 202, ib. note, 203, 267 note
Blakewell, ii 105
Bland, R., iii 248
Blane, Dr., i 363
Blaney, Dr., ii 257 note
Blasius, i 276 note
Bletterie, ii 240, 244
Bloch, Mark Eleazer, i 156, 159; iii 173
Blodget, ii 62
Bloomer, Josh., iii 22 note
Bloomfield, Rob., iii 32
Blumenbach, prof., i 146, 148, 154, 307; iii 173
Boccalini, i 26 note
Bochart, ii 242
Bode, ii 251, 261
—— prof., i 79, 404
Bodini, ii 236
Bodmer, iii 168, 170
Boerhaave, i 94, 118, 141, 165, 182, 280, 299, 316, 317, 318, 319, 320, 327, 352; ii 15 note, 358
Boëthius, iii 315 note
Bogdanovitch, iii 163
Bohadsch, i 28, 158, 276 note
Boileau, iii 22, 84
Bois, Fran. du, *see* Sylvius
Boissy, iii 51
Boizot, ii 140
Bolingbroke, lord, ii 297; iii 14 note
Bolton, i 180
Bomare, i 197
Bond, Dr. Phin., iii 214 note
—— —— Thos., ii 16, 19; iii 328
Bondt, i 124
Bonet, i 365
Bonetus, The., i 274
Bonnett, Charles, i 157, ib.

note, 159, 170, 276 note, 308; ii 94, 216
Bonnycastle, J., ii 74
Bononcini, ii 151
Boon, ii 56
Borch, count, i 240 note
Borda, chev. de la, i 44, 51, 86; ii 32
Bordley, ii 100 note, 107
Borelli, prof., i 279, 286, 315, ib. note, 316
Born, bar., i 197, 236
——— prof. F. G., ii 202
Bos, Lamb., ii 230
Boscawen, W., ii 239
Boscovich, R. J., i 20, ib. note, 21, 22 note, 78, ib. note, 382, 383; ii 54, 209; iii 18
Bossu, ii 56
Bossuet, ii 235
Bossut, ab., i 44, 47, 51,
Bostock, Dr. J., i 392, 395
Boston, rev. T., ii 255
Boswell, Jas., ii 365, 367 note, 387 note; iii 15 note, 297 note
Botin, ii 320, 350
Boucher, ii 131
Bouchet, ii 242
Boettiger, C. A., iii 178
Botetourt, lord, iii 246, ib. note
Bottger, J. F., ii 121
Boucher, iii 236
Bougainville, i 165; ii 36, 37
Bouguer, i 44, 60, 62, 72, 243, 251; ii 59
Bouilly, iii 52
Boulduc, i 255
Boulton, i 402; ii 115
Bourgelat, i 149
Bouvard, i 73, 80
Bowdoin, Jas., i 89; iii 104, 221 note, 250 note, 261, ib. note, 330, 331, 339
Bowen, ii 60
Bowles, W. L., iii 37
Boyce, ii 151
Boyle, C. & J., see Orrery, earl of,
——— R., i 23, 67 note, 93, 94, 102, 118, 255, 288, 327 note; iii 100
Boylston, Dr., i 355, ib. note, 356
——— N., iii 222
Boze, prof., i 25, 26; ii 96; iii 173
Braun, van, ii 44
Brachmel, i 189, 190
Bradford, And., iii 91, 92 note
——— W., iii 92, ib. note
Bradley, Dr., i 60, 71, ib. note, 74, 75, 79, 80, 83, 404
——— Richard, i 170; ii 102
Bradshaw, pres., ii 334 note
Brady, Nic., iii 21
Braidwood, Thos., i 365, 366
Brailsford, Dr., i 181
Bramah, i 46
Brandt, i 199
Braun, iii 172
Bray, Dr. T., iii 226
Breitinger, iii 168, 170
Brewster, ii 239
Breyne, Dr., i 150
Breze, i 256
Bridel, S. E., i 190; iii 173
Bridgwater, duke of, ii 88
Brindley, Jas., ii 88, 89, ib. note

Brisson, i 58, 144, 145, 153, ib. note, 195
Brocklesby, Dr., i 363
Bromfield, i 372, 373
Brooke, i 385
——— iii 12
——— Mrs., ii 389; iii 132 note
Brosses, pres. de, ii 233, 337
——— des, ii 63
Brotier, ii 236, 237
Brougham, i 61
Broussonet, i 155, 276 note, 309; ii 94, 104
Browal, bish., i 189
Brown, C. B., ii 390
——— Dr. John, i 284, 309, 334, ib. note, 336, 337, ib. note, 345, ib. note
——— —— Sam., ii 23
——— T., ii 419
Browne, ii 44, 49
——— Dr. Pat., i 182
Bruce, ii 48, 50 note
Brucker, ii 358
Brunck, R. F. P., ii 236
Bruns, prof., ii 60, 256 note
Bruyere, la, iii 84, ib. note, 85
Bryant, Jacob, i 148; ii 61, 323; iii 65 note
Buat, chev. de, i 44, 47, 51
Buchan, ii 13
Buchholz, ii 350
Buffier, pere, ii 182, 183, ib. note, 404
Buffon, count de, i 145, ib. note, 146, 148, 150, 153, 163, 213, 214, 215, 216, 223, 234, 240 note, 308, 309; ii 158, 311; iii 290
Bugge, i 89
Buhle, ii 236
Bulfinger, iii 155
Bulgarus Hugolinus, iii 317 note
Bull, Dr. W., ii 15 note; iii 227, 228 note
Bulliard, i 179, 182
Bullet, ii 325
Bulwer, i 365
Bunbury, H., ii 133
Burckhardt, i 78, 80; iii 173
Burdon, Row., ii 114
Burg, i 73, 80
Burgoyne, gen., iii 45
Burigni, ii 367
Burke, Edm., ii 64 note, 134 note, 300, 301 note
Burkhard, J. H., i 169, ib. note, 170 note
Burlamaqui, iii 337, 348
Burmann, prof., i 180, 182; ii 136, 237
Burnet, bp., ii 340 note, 343; iii 192 note
——— gov., iii 216 note
——— Jas., *see* Monboddo, lord
——— rev. Dr. T., i 204, 206; ii 151; iii 196 note
Burney, ii 237 note
——— Dr. C., ii 148 note, 149 note, 358, 365
——— miss, *see* d'Arblay
Burns, i 50; ii 114
——— Rob., iii 31, ib. note 35
Burr, Aar., ii 155 note; iii 204 note
——— rev. Aar., iii 204 note, 205
Burrow, Reub., ii 278
Busching, ii 60

Butler, bp., ii 176, 205, 215
——— Nat., iii 89
——— S., iii 27
Buxtorf, J., sen., ii 244, 248, 255
——— —— jun., ii 244, 255
Byrd, col., iii 225
Byron, capt., ii 32

C.

Cadet, i 134
Cadwallader, Dr., ii 15
Cæsar, ii 237, 239; iii 343
Cæsarotti, ii 240, ib. note, 314; iii 10 note, 13, 53
Cagliostro, count, ii 13
Cagnoli, i 89
Caille, de la, i 79, 80, 251, 404, 405; ii 48, 84
Calamy, Dr. Edm., jun., iii 196 note
Caldani, i 284
Caldwell, Dr., ii 24
Callet, ii 80
Callimachus, ii 236, 239
Camera, i 198
Camerarius, i 169
Camoens, iii 12, 13 note
Campbell, Dr. G., ii 214, 215, 337
——— J., ii 363
——— (geog.), ii 63
——— (poet), iii 32
Campe, iii 124
Camper, i 148, 272, 276
Camus, i 72
Caner, Dr. H., iii 235
Canitz, iii 178
Canova, ii 140, ib. note
Cant, i 273
Cantemir, iii 6
Canton, i 28, 39, 121, 247, 253, 384, 397,
Capellus, Lew., ii 244, 249
Capperonier, ii 236
Carestini, ii 152
Carey, Mat., iii 257 note
——— W. ii 279
Carl, i 324
Carla, du, i 251
Carlini, ii 140
Carlisle, i 34, 390
Carmoy, i 80, 383; ii 97
Caroline, queen, i 20
Carr, ii 238
Carradori, i 254, 289 note
Carter, Mrs. E., ii 239, ib. note; iii 130 note, 131, ib. note
Carteret, capt., ii 32
Cartes, Rene, des, ii 68, 165 note, 167, ib. note, 168, 183, 185, ib. note, 192
Cartheuser, i 197; ii 5; iii 174
Cartwright, ii 57
Carver, J., ii 56, 325
Cary, iii 277 note
Casa, ii 314; iii 84, ib. note, 85
Cassan, i 243
Cassas, ii 44
Cassini, D., i 72, 73 note, 80
——— J., i 83
——— de Thury, ii 61, ib. note
Castiglione, iii 84, ib. note
Caswell, i 52
Cat, le, i 62, 211, 212
Catcot, i 209 note
Catesby, Mark, i 153, ib. note, 161, 183, ib. note; iii 229, ib. note, 231, 276 note

Catharine I, of Russia, iii 155, 156
——— II, of Russia, ii 52, 322, 324; iii 154 note, 158, 159, 160, 161 note
Catt, le, ii 158
Cattaneo, ii 59
Catteau, ii 320 note, 350 note; iii 6 note
Catton, C., ii 135
Catullus, ii 239
Cavallo, i 31, ib. note, 33, 39, 54, 384; iii 348
Cavanilles, ab., i 180, 182
Cave, E., iii 80, 81
Cavendish, hon. H., i 30, 31, 53, 54, 103, 104, 107, 110, 112, 132, 134, 245, 248, 388, 419, 421
Cawley, i 400
Caylus, count, ii 136
Celsius, bish. O. O., ii 350
——— prof., i 39, 72, 132, 182, 420
Celsus, i 352
Cépède, la, i 153, 154, 156, 160 note
Ceruti, ii 240
Cervantes, Miguel de, ii 372, 377
Chabart, ii 42
Chalmers, Dr. Lionel, ii 17; iii 228, ib. note
Chambers, Eph., iii 110, 111
Champagne, ii 240
Chandler, Dr. T. B., iii 219, ib. note, 236
——— R., ii 54
Chanler, I., iii 229, ib. note
Chapone, Mrs., iii 131
Chappe, i 67, 68
——— *see* Auteroche, d'
Chaptal, i 121, 134, 178, 197; ii 120; iii 348
Charas, i 276 note
Charles, i 55
Charleton, i 188
Charlevoix, ii 56, 57, 325
Charmes, Pajot de, ii 120
Charpentier, i 236
Chateauvieux, ii 104
Chatelet, mad., iii 132, ib. note
Chatterton, T., iii 62, 64, ib. note, 65, 66, ib. note, 67 note
Chaucer, ii 66 note, 315 note
Chaudet, ii 140
Chauncey, iii 188, 223 note
——— Dr. C., iii 234, ib. note
Chaussee, iii 51
Chenier, ii 48
Cherachi, ii 140
Cheselden, i 265, 272, 300, 370, 373
Chesterfield, lord, iii 24 note
Chiabrera, ii 313
Chisholm, Dr., i 362, 368; ii 8
Chladni, Dr., i 59; ii 150
Chomel, ii 3
Churchill, ii 63
——— C., iii 25
Churchman, i 38, 39, ib. note
Cibber, Col., iii 44
Cibot, ii 284
Cicero, ii 236, 239, 365, 403; iii 199 note, 268, 315 note, 340, 343
Cigna, i 289, 290, 385
Cignani, ii 128, 130

Circaud, i 394
Clairaut, i 64, 72, 73, 80; ii 73, 74, 75
Clap, T., iii 223, ib. note, 261
Clarendon, lord, ii 295, 301, 340 note, 343
Clarke, Dr., iii 268
——— J., i 363
——— S., i 20, 362; ii 180, 205, 212, 213, 236, 237, ib. note
——— J., ii 239
——— R., iii 229, 230 note
Claudian, ii 237,
Clavigero, ii 56, 325, 350
Clayton, Dr. J., i 184, ib. note; iii 233, ib. note, 277 note
——— sir R., iii 17 note
Cleghorn, i 352, 368
Clerc, le, ii 54
——— Dan. le, ii 358
——— J. le, ii 216; iii 74
Clesmur, du, ii 37
Clipperton, ii 30
Clos, du, i 255
Clossey, Dr. Sam., ii 19, 20
Cockburn, Mrs. C., iii 131
Coke, ii 103
——— T., iii 347
Colbert, J. B., iii 100
Colden, Cadw., i 89, ib. note, 184, ib. note; ii 352; iii 231, ib. note, 262, 276 note
——— Dr., i 355 note; ii 17, ib. note
——— miss, i 184 note; iii 231 note
Colebrook, Josh., ii 136
Colebrooke, ii 278, ib. note
Coleman, i 276 note
Coleridge, S. T., iii 9 note, 35
Collier, Arth., ii 173
Collins, i 276 note
——— And., ii 205, 207, 212 note
——— Dav., ii 39
——— I., iii 259
——— W., iii 33, ib. note, 34
Collinson, Peter, i 170 note, 426; ii 16 note; iii 213, ib. note, 233 note
Collyer, ii 60
Colman, G., ii 239; iii 45
——— jun., iii 46
Columbus, i 262; ii 35
Combrune, ii 120
Commelin, i 182
Commerson, i 185
Comolli, ii 140
Condamine, i 72; ii 59
Condillac, ii 215, 330, 337
Condorcet, i 41 note, 44, 104, 186 note; ii 73, 203, 368, 388 note; iii 144, 149
Confucius, ii 281
Congreve, W., ii 132; iii 41, 59
Cook, captain Jas., i 359, 360 note; ii 29 note, 34, ib. note, 35 note, 36, 37, 39, 40, 49 note, 51, 66
Cooke, ii 239
Cooper, Dr., i 181
——— Myles, iii 236, ib. note
Coote, ii 347
Copley, J. S., ii 130, ib. note, 155; iii 266
Corelli, prof., ii 147
Cornette, i 256

Cortlandt, Phil. van, iii 220 note
Cosmo III of Tuscany, i 122
Costard, G., ii 261
Cotte, de la, i 243, 251
Cotton, iii 188
Cotunnius, i 272
Coulomb, i 99
Couplet, ii 280
Courtanvaux, ii 42
Coventry, i 252
Coward, Dr. W., ii 211
Cowley, Abr., iii 3, ib note
——— Mrs., iii 46, 132 note
Cowper, W. (poet), ii 238, 367 note; iii 13, ib. note, 20, ib. note, 21, 25, 35, 71
——— — (surg.), i 264, 265, 273
Coxe, W., ii 53, ib. note, 321 note, 322 note, 365; iii 154 note
Craig, J., ii 73
Cramer (math.), ii 74, 75
——— (poet), iii 22, 170, 172, 177
Crantz, i 182
——— Dav., ii 57 note
Craven, lady, ii 54; iii 132 note
Craufurd, G., ii 278
Crawford, i 118, 124, 133, 291, 296, 297
Crebillon, sen., iii 49
——— jun., ii 379; iii 56
Creech, T., ii 239
Crell, i 117, 135; iii 174
Crenne, de Verdun de la, ii 32
Creutz, count de, ii 320; iii 5
Creve, i 389
Crevier, ii 236
Croft, Herb., ii 308 note; iii 66 note, 67 note
Croix, de la (poet), i 170 note; iii 16 note, 18 note
——— (math.) ii 73
Croker, H. T., iii 112
Cronstedt, F., i 124, 188 note, 190, 198, 199, 236
Crousaz, ii 216
Crozat, ii 56
Croze, la, ii 251
Cruger, iii 55, 178
Cruickshank, i 34, 134, 270, 275, 390
Crutwell, ii 63
Cruz, don J. de la, ii 59, ib. note
Cuff, i 67
Cullen, Dr. E., ii 150
——— — W., i 112, 306, 330, ib. note, 331, 332, 333, 336, 350, 352; ii 5, 17
Culpepper, i 67
Cumberland, ii 237
———, R., iii 8, 45
Cumming, Dr. J., ii 22; iii 253, ib. note
Cummings, Alex., iii 202 note
Cunæus, i 25
Currie, Dr., i 352, ib. note; ii 7, 24; iii 31 note
Curry, ii 57
Curtis, i 180, 181
Cuthbertson, i 52, 385
Cutler, Dr. Manas., i 184, ib. note, 251; iii 264
——— Tim., iii 222, ib. note
Cuvier, i 151, 158, 276, 307, 422, 423, 424

D.

Dacier, mad., ii 240; iii 130 note, 132, ib. note
Dahl, ii 128
Dahlberg, i 186
Dahlin, ii 320, 350; iii 5, 11, 36, 56
Dalgarno, i 365
Dalibard, i 27
Dallaway, ii 54
Dalrymple, Al., ii 62, 63
Dalton, i 58, 251, 253
Damer, hon. Mrs., ii 140, ib. note; iii 132 note
Dante, ii 36
Dantz, prof., ii 249
Darcet, i 123
Darcu, ii 240
Darley, A., ii 114
Dartmouth, lord, iii 242 note
Darwin, Dr. Er., i 134, 177, 179, 188 note, 235, 309, 338, ib. note, 339, 340, 341, 344, 345, ib. note, 346 note, 350, 385, 397; ii 5, 46 note, 94, 96, 97, 104, 209, 211, 408, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419; iii 16, 17 note, 67 note, 132
Daubenton, i 148, 150, 194, 276
Davenport, J., iii 188, 189 note
David, ii 131
Davidson, Jos., ii 239
Davies, S., iii 202 note, 267, ib. note
Davis, i 407 note, 413, 414
—— S., ii 276
Davy, i 34, 103, 118, 134, 289, 292, 293, ib. note, 297, 350 390, 391, 392, 393, 422
Davy, major, ii 268
Dawes, i 80
Day, S., iii 124.
Debern, i 197
Degen, ii 236
Degrandpre, ii 50
Dehl, ii 141
Delambre, *see* Lambre, de
Delametherie, i 134, 197, 225, 226, 234
Delany, Mrs., i 428
Delaval, i 63; ii 121, 150
Delisle, ab., iii 18, 19 note, 30
——— *see* Isle, de l'
Delor, i 27
Democritus, i 76 note
Demosthenes, ii 236, 238, 240; iii 343
Denham, sir J., iii 3
Denman, Dr., i 377
Dennis, iii 74
Deparcieux, Ant., ii 72
Derschaven, iii 163
Desaguliers, Dr., i 24, 49, 50, 51, 53, 243; ii 114; iii 348
Desfontaines, i 160, 177, 185, 308; ii 94
Desmond, W., ii 120, ib. note
Destouches, Phil., iii 50
Dexter, Dr. Aar., ii 22; iii 263
Dibdin, iii 46
Dickinson, J., iii 247, ib. note, 251, 346
——— Jon., iii 198, 204 note, 205
Dickson, Dr., Steph., i 126, 127
——— Jas., i 179
Dicquemare, i 276 note

Diderot, ii 378, 379, 388; iii 50, 111
Didot, ii 117, ib. note
Dieman, i 124
Diemerbroeck, prof., i 263
Dietrich, ii 130
Dillenius, prof. J. J., i 172, 180, ib. note, 181
Diodorus Sic., ii 236
Dion Cassius, ii 236
Dixon, capt., ii 29 note, 39
Dobritzhoffer, ii 59
Dobson, Mrs., ii 365; iii 132 note
——— T., iii 143, ib. note, 257 note
Doddridge, Dr. Phil., iii 21, 193 note, 223 note, 337, 339
Dodson, Jas., ii 72, 74
Dodwell, H., ii 211, 212, ib. note
Doederlein, Dr. J. C., ii 254, 255 note
Dollond, i 64, 402
Dolomieu, i 197, 237, 240 note
Dombey, i 160, 185, 237
Dohati, i 158, 159, 276 note
Donovan, i 157
Dorat, iii 52
Dorthes, i 121
Dotterville, ii 240
Douglas, Dr. W., i 355, ib. note, 356 note
——— Jas., i 265
Dow, Alex., ii 270, 275
Downey, W., i 425
Downman, Dr. Hugh, iii 17
Drake, Dr. N., i 6 note; iii 11 note, 37
Drakenborch, ii 236, 237
Dran, le, i 372
Drayton, W. H., iii 248, ib. note
Driessen, ii 261 note
Drummond, W., ii 239; iii 36
Drury, i 157
Dryden, J., ii 295; iii 2, ib. note, 4, 13, 22, 44, 51, 59
Dubelloy, iii 50
Duche, Jac., iii 215 note
Dudley, Paul, iii 231
Dufay, i 63; ii 121
Duhamel, i 176, 308
Duker, ii 236, 237
Dulaney, D., iii 248, ib. note
Dummer, Jer., iii 196
Duncan, ii 239
——— Dr., ii 11
——— J., iii 348
Dundonald, lord, i 134; ii 94, 96, 97
Dunkelberg, K., iii 188
Dunning, ii 334 note
Dunster, iii 188
Dunthorne, i 80
Dupuis, ii 245
Durell, ii 251
Dusch, J., iii 19, 178
Dutens, i 6 note, 26 note, 169 note; ii 178 note
Duval, Grafton, i 425
Duvaucel, i 89
Dwight, Dr. Tim., ii 25 note; iii 67, 104, 243, 341
Dyer, J., iii 15

E.

Earle, sir Jas., i 373
Eaton, iii 188

Ebeling, prof., ii 60, ib. note; iii 175
Eberhard, ii 202
Edgeworth, Maria, iii 119, 124, 132
———— R. L., iii 119
Edwards, Bryan, ii 50 note, 349 note
———— Dr. Jon., ii 325, 326 note, 407
———— T., ii 247; iii 196 note
———— G., i 152, ib. note
———— J., i 66
———— Jon., ii 205, 206, ib. note; iii 208, ib. note, 267, ib. note, 268, 338
Eeles, i 385
Egede, Hans, ii 57 note
Eichhorn, prof., ii 251, 256; iii 179
Elam, Sam., iii 341
Elhuyart, de, i 199
Eliot, rev. Dr., i 356 note, 418; iii 104, 105 note, 188, 241 note, 253 note, 257
Eller, ii 96
Ellicott, i 90; iii 262
Ellis, i 67
—— J., i 159, 161, 180, 276 note
—— W., ii 103
—— —— ii 238
Elizabeth, emp., iii 158
———— queen, iii 129 note
Elliven, iii 163
Elphinstone, Jas., ii 304, 305
Elvius, i 50; ii 115
Emerson, i 45, 50; ii 70, 73, 75, 114
Emmons, Dr., iii 268
Empedocles, i 168
Enfield, Dr. W., ii 358, 363; iii 337
Engel, J. H., i 235; iii 171
——— J. J., iii 55, 178
Englefield, sir H., i 78, ib. note
Entrecasteaux, ii 42
Epée, abbé de l', i 366, ib. note
Epictetus, ii 236, 238; iii 131 note
Epicurus, ii 208, 235 note
Erasmus, ii 365, 367
Ernest, J. C. G., ii 236, 237; iii 178
Erpenius, ii 242, 260
Erskine, T., ii 376 note
Erving, W., ii 22, ib. note; iii 253, ib. note, 336
Estala, ii 63
Estrange, sir Rog. l', iii 90
Etches, capt., ii 39
Eton, ii 54
Euclid, iii 337, 343
Eugenius, abp. of Slavensk, ii 240; iii 164 note
Euler, L., i 38, 39, 44, 45, 48, 64, 73, 75, 80; ii 72, ib. note, 74, 75, 76, 84; iii 154
Euripides, ii 236, 239; iii 315 note
Eustachius, i 262
Eustathius, ii 233
Eutropius, ii 237
Evans, Lew., ii 58
Evelyn, J., ii 92
——— sir G. S., i 52, 243; ii 78 note

Ewing, Dr. J., i 85, 89; iii 238, 239, ib. note, 262, 269 note, 328

F.

Fabricius, ii 236
——— ab. Aquapendente, i 262
——— J. C., i 157, ib. note, 158, ib. note
Fabroni, i 35, 198, 389, 392
Fabronius, ii 364
Faden, Wm., ii 59 note
Fahrenheit, i 120, 121, 131, 133, 420
Fairchild, i 170
Falk, J. P., iii 161
Falconer, Dr. W., i 26 note 421
——— W., iii 31, ib. note
Falkener, father, ii 59, ib. note
Fallopius, i 262
Farinelli, ii 152
Farquhar, G., iii 44, ib. note
Fasch, ii 151
Faujas, i 197
Fawkes, Fran., ii 239
Fay, ii 120
——— du, i 24, 27, 28, 29
Fazel, Abul, ii 271 note
Feder, ii 202, 216; iii 118, ib. note
Fenelon, abp., ii 385; iii 132
Feraud, abbé, ii 311
Ferber, i 198, 236, 240 note
Ferguson, ad., ii 347
——— Jas., i 84, 89; iii 337
Ferishta, ii 270 note
Ferrein, ii 5
Ferriar, Dr., i 329 note
Feuillie, ii 30
Fielding, H., ii 298, 374, ib. note, 375, 376, ib. note, 377, 380, 382, 397 note
Finley, Dr. Sam., iii 202, ib. note
——— Jas., iii 202 note
Fiamingo, ii 140
Fischer, F. F., ii 237
——— (mus.), ii 151
Fisher, iii 227 note
Fitzgerald, Dr., ii 249, ib. note 250
Fitch, Dr. Ebe., iii 338
Flamstead, rev. J., i 70, ib. note, 405, 412
Flatt, prof., ii 202
Flaxman, ii 140
Florian, ii 389
Florinsky, iii 161
Florus, ii 237
Fobes, iii 261
Foersch, ii 46, ib. note
Fontaines, des, *see* Desfontaines
Fontana, abbé, i 102, 103, 134, 154, 276 note, 307, 309
Fontenelle, ii 311, 363; iii 34, 47
Foote, Sam., iii 46
Ford, sir Fran., ii 97
Fordyce, Dr. G., i 368
——— Jas., iii 132
Forrest, ii 42, 46, 47
Forskaol, i 276 note
Forster, Dr. G., i 185
——— J. R., i 147, ib. note, 184, 186, 234, 253; ii 36 note, 44, 278, 323; iii 173
Forsyth, W., ii 103
Fortis, abbé, i 150

Foster, ii 112 note
Fothergill, Dr., i 170 note, 368, ib. note; ii 9; iii 199 note
Foulis, And., ii 117
Fourcroy, i 33, 34, 103, 110 note, 111, 124, 178, 197, 256, 290, 349, 391
Fourmont, ii 282
Fowle, Dan., iii 92
Fowler, Dr., i 33
Francis, Mrs., iii 132 note
——— I of Germany, i 123
——— Ph., ii 239
——— Tench, iii 214 note
Franckling, T., ii 238, 239
Franklin, Dr. B., i 26, ib. note, 27, ib. note, 28, 53, 121, 235, 244, 246, 251, ib. note, 253, 356 note, 386, 388; ii 16 note, 44, 123, 149, 150, ib. note, 268, 304; iii 76, 81, 91 note, 103, 199 note, 206, ib. note, 207 note, 209, 212, 213, ib. note, 214 note, 215, 219 note, 221 note, 238, 242 note, 250 note, 328, 331
——— Jas., i 356 note; iii 91, ib. note, 92
Frederic II of Prussia, iii 183, ib. note
Frediatofsky, iii 6
Freeman, rev. Dr., iii 105 note
Freneau, iii 68
Fresnoy, Lenglet du, ii 359 note
Frezier, ii 30
Frisch, i 150, 158; iii 168, 173
Frisi, i 89
Fronto, Julius, iii 353
Fry, ii 62
Fryanfynofsky, iii 159 note
Fuchs, ii 151
Fulda, iii 169
Fulhame, Mrs., i 127
Furneaux, capt., ii 39
Fuseli, ii 130, 135
Fyfe, i 270, 271, 273

G.

Gabriel, don, ii 237, ib. note
Gabrielli, ii 152
Gærtner, Jos., i 177; iii 173
Gahn, i 122, 124, 196, 199
Gail, prof., ii 236, 240
Gainsborough, ii 134, 135
Gale, Dr. Ben., ii 8 note, 16
Galen, i 299, 311, 312, 317, 352
Galileo, i 312
Galletti, J. G. I., ii 349; iii 175
Gallissonierre, marq. de la, i 183, ib. note
Galloway, Jos., iii 247, 248 note, 249 note
Galvani, Dr., i 31, 32, 35
Garden, Dr. Alex., i 153, 154 note, 161, 183; ii 9, 17; iii 228, 229, 230 note, 231, 276 note
Gardeyef, iii 163
Gardner, ii 80
Garnett, Dr. T., i 34 note, 36 note, 156 note, 197, 256; ii 141 note
Garrick, Dav., iii 45
Garth, Dr. S., ii 239
Garve, Christ., i 394; iii 171
Gassendi, i 253

Gatterer, iii 175
Gaubius, i 324, ib. note, 325
Gaultier, abbé, iii 124
Gay, J., iii 33, 47
Gebauer, iii 175
Gebelin, Court de, i 148; ii 311, 323, 337
Ged, W., ii 116, ib. note, 117, ib. note
Geer, de, i 157
Gellert, i 197; iii 174
——— C. F., ii 316; iii 5, 22, 170, 176, 177
Gengembre, i 103
Genlis, mad. de, ii 389; iii 119, 124
Gentil, le, ii 276, ib. note, 284
Geoffrey, i 157
Geoffroy, i 94, 112, 170, 276, note; ii 3
George the First, ii 31
——— the Third, iii 242 note
Georgi, Dr. J. G., ii 54; iii 161
Gerard, i 173, 182
——— ii 131
Gerstenberg, iii 55
Gesner, J. A., ii 236, 237
——— J. M., ii 236
——— Sol., ii 316; iii 4, 5, 33, ib. note, 34, 71, 176, 177, 178
Gezelius, ii 363
Giannoni, ii 350
Giardini, ii 152
Giarnovichi, ii 151
Gibbes, Dr., i 387
Gibbon, E., ii 301, 303, 346, ib. note; iii 175, 235 note
Gieseke, iii 19
Gifford, iii 25, 28
Gilbert, Dr., i 23, 36
Gill, Dr., iii 230 note
Gillies, Dr. J., ii 238, 239, 347
Gilpin, ii 135
Gioannetti, i 256
Giobert, i 178; ii 95
Gioenni, chev., i 198, 241 note
Giordano, ii 128, 130
Girard, ab., ii 337
Giraudet, ii 131
Girtanner, Dr., i 117, 125, 291, 349
Gisborne, T., iii 32
Gladwin, Fran., ii 268
Gleditsch, prof., i 175
Gleig, Dr., i 22 note, 30 note
Gleim, F. W., iii 5, 177
Glenie, Jas., ii 71
Glisson, Dr., i 266
Glover (of Virginia), i 161, ib. note
——— R., iii 8, ib. note
Gluck, ii 151
Gmelin, i 117, 150, 178, 182, 236, 253, 308; ii 5 note, 44, 45, 53; iii 161, 173
Gobien, C., ii 44 note, 269 note
Godfrey, Thos., i 85, 406, 407, ib. note, 408, 415, ib. note, 416, 417; ii 84; iii 261, 266
——— ——— jun., i 417
Godin, i 72; ii 59
Godwin, Mrs. M. W., ii 388; iii 133
——— W., ii 203, 302 note, 388; iii 144, 149
Goethe, J. W. von, ii 316, 389;

iii 25, 30, 54, 55 note, 176, 178
Goeze, i 159
Goldoni, C., iii 54, ib. note
Goldsmith, Ol., ii 298, 347, 355, ib. note 381, ib. note, 397 note; iii 31, 45, 56 note, 71
Golius, ii 242, 260
Gollikof, iii 163
Golovin, iii 162
Gomarus, ii 246 note
Gooch, i 373
Goodwin, Dr., i 294
Gordon, ii 60
——— T., ii 239
Gosec, ii 151
Gosselin, ii 61
Gossett, ii 140
Gottsched, J. C., iii 4, 168, 169
Gouan, i 155, 173, 182, 276 note
Goudin, i 81
Gough, Dr. J. P., ii 101 note
Goulard, ii 8
Gousset, ii 261 note
Graaf, de, i 263
Grævius, ii 235
Graham, Geo., i 44, 84, ib. note, 85, 86
——— Mrs. C. M., ii 347, 355, ib. note; iii 131
Grainger, Jas., ii 239
Gralath, i 25
Granelli, iii 53
Grange, de la, i 51, 73, 75, 291; ii 73, ib. note, 74
Granger, Jas., ii 362
Grant, ii 51
Graun, ii 151
Gravina, ii 313
Gravesande, i 44, 52
Gray, ii 249
——— lady Jane, iii 129 note
——— T., ii 365; iii 35, 38, ib. note, 66 note
Green, B., iii 91
——— S., iii 188 note
——— W., ii 246, ib. note
Greene, ii 151
Greenland, miss, ii 136
Greenway, iii 277 note
Greenwood, iii 261
Gregory, Dr. G., i 55 note
——— —— J., iii 132
——— —— Jas., ii 205
——— Jas., i 65; ii 68
——— rev. G., ii 246 note
——— XIII, pope, i 88; ii 88 note
Gren, i 124, 257, 291
Gresset, iii 28, 36, 51
Gretry, ii 151
Greuze, ii 134
Grew, Dr., i 169, 170, 175, 308
——— Theoph., iii 200, ib. note
Grey, Steph., i 24, 66
Grierson, Mrs. Con., ii 236, ib. note, 237; iii 130 note, 132, ib. note
Griesbach, ii 252 note
Griffiths, ii 62
Grischow, i 89
Gronovius, i 156, 162
——— J., ii 236, 237
——— J. F., ii 235, 229 note, 233 note
Grosier, ab., ii 44, 281, 284
Grosser, de, i 121

Grossman, iii 55, 178
Grout, Jon., i 68 note
Grove, ii 215
Guarinus, ii 244
Guerrin, ii 240
——— (paint.), ii 131
Guettard, J. S., i 176
Guirhard, ii 141
Guglielmini, i 46, 47
Guido, ii 128
Guignes, ii 282
Guillot, Merin, i 125
Guldenstædt, ii 53; iii 161
Gusman, Bar., i 53
Guthrie, W., ii 60, ib. note, 63, 239
Guys, ii 54
Guyton-Morveau, i 110, ib. note, 111, 113, 122, 123, 134, 254, 421
Gwither, Dr., ii 158
Gyllenborg, ii 96
——— count de, ii 320; iii 5, 12, 36, 56

H.

Haberlin, ii 349; iii 175
Hackman, iii 162
Hadley, i 51, 65, 85, 406, 407, 417; ii 84
Haen, von, i 368; iii 174
Hagar, Dr. Jos., ii 284, 285 note
Hagedorn, iii 19, 177
Hagen, i 180
Haiter, ii 234 note
Haldane, Col., i 390
Halde, J. B. du, ii 44, ib. note, 269 note, 281
Hales, rev. Dr., i 97, ib. note, 102, 103, 110, 125, 166, 176, 251, 288, 308, 363; ii 94, 96, 97
Halhed, N. B., ii 271, 272, 273, ib. note, 278
Hall, iii 215 note
—— Chester More, i 402, 403
Hallenberg, ii 350
Haller, baron A., i 174, 175, 182, 268, 272, 273, 274, 275, 280, 281, ib. note, 282, 283, 284, 285, 287, 307, 309, 318 note, 324 note, 336; ii 158, 316; iii 4, 5, 19, 30, 177
Halley, Dr. Edm., i 38, 52, 58, 70, ib. note, 71 note, 77, 80, 82, 231, 243, 248, 251, 253, 407, 415, 416; ii 71; iii 196 note
Hamel, du, i 124; ii 94, 102, 104
Hamersley, Dr. W., ii 21
Hamilton, iii 270
——— Dr. Hugh, i 243, 244, ib. note, 377; ii 75
——— (of Dublin), i 253
——— miss, ii 388; iii 119, 132
——— sir W., i 240 note, 248
Hammond, Jas., iii 38
Hampton, ii 239
Hancock, J., iii 222 note
——— T., iii 221 note, 222, ib. note, 336
Handel, G. F., ii 149, 152
Hanmer, sir T., iii 48
Hanway, ii 44
Hardie, iii 232 note
Hardouin, ii 237

Hare, bish. F., ii 245, 246 note
Hargrave, Jas., ii 110
Harmer, rev. T., ii 288
Harpe, la, iii 49 note
Harris, ii 62, 63
——— Dr. J., i 62; iii 110, ib. note
——— Jas., ii 194, 213, 331, ib. note, 332, 335
——— W., ii 367
Harrison, J., i 83; ii 123 note
Hartley, Dr. Dav., i 149; ii 189, ib. note, 191, 192 note, 193, 205, 209, 331, 406, 407
Hartlib, ii 91
Harvard, J., iii 335
Harvey, Dr., i 143, 262, 263, 305
Harwood, ii 236 note
Haskins, i 51
Hasse, prof., ii 256; iii 179
Hasselquist, i 182
Hassenfratz, i 112, 178, 197, 254, 256, 290, 292; ii 94, 95, 97
Hastings, War., ii 265, 270, 271 note
Hatchett, i 125, 126
Hatton, T., ii 77, 78 note
Hauy, i 197; ii 76
Havercamp, ii 237
Hawes, Dr., i 367
Hawkesworth, Dr. J., ii 63, 298
Hawkins, i 373
——— sir J., ii 358
Hawksbee, i 24, 52, 58
Haydn, ii 148, 151
Haye, ii 239
Hayley, W., ii 367 note; iii 17, 20 note, 27
Haynes, iii 188
Hays, Mary, ii 388; iii 133
Haywood, H., iii 229, 230 note
Hazard, Eb., i 417; ii 359, ib. note
Hearne, Sam., ii 54
Heath, ii 146
Heberden, i 368
Heckewalder, i 162 note; ii 326 note
Hedouville, iii 74 note
Hedwig, i 179; iii 173
Heeren, iii 178
Hehl, i 40
Heinecke, i 366
Heinrich, ii 349; iii 175
Heister, L., i 270, 273, 369; iii 174
——— prof., i 169 note, 179
Heliodorus, bish. of Tricca, ii 370, ib. note, 371
Hellot, i 63; ii 121
Helmont, van, i 102, 314, 329
Helms, ii 59
Helsham, iii 348
Helvetius, Cl. A., i 489; ii 202, ib. note, 388 note; iii 144, 149
Hemsterhuis, Tib., ii 229, ib. note, 230 note, 236, 332, ib. note
Henkel, i 155; iii 174
Henley, i 384
Henry, ii 57
——— Dr., iii 63 note
——— Rob., ii 347, 355, ib. note
——— Hugh, iii 202 note
——— Math., iii 196 note
——— W., i 134, 390; ii 121

Herbelot, d', ii 242, 260
Herder, J. G., i 149; ii 202, 248, 316, 330, ib. note, 389; iii 10 note, 11 note, 22, 171, ib. note, 176, 178
Heretier, l', i 180
Herlet, J., i 158
Hermann, Dr. Paul, i 165, ib. note, 234, 327 note
Hermbstadt, i 135
Hermes, F. J., ii 389
Hero, i 399
Herodotus, ii 236, 238, 240; iii 352
Herring, abp., iii 218 note
Herschel, Dr., i 66, ib. note, 68, 74, 75, 76, 79, 86, 118, 120, 121, 404, 405, 420; iii 173
Hersey, Dr. Abn., ii 22; iii 253, ib. note, 336
——— —— Ezek., ii 21; iii 253, ib. note, 336
Hervas, J. L., ii 324
Hesiod, ii 236, 239, 240; iii 159 note
Heusinger, iii 178
Hevelius, i 405
Hewson, i 269, 270, 275
Heyne, C. G., ii 236; iii 178
Hezel, prof. W. F., ii 256, 261; iii 179
Hielm, i 199
Hierne, i 188, 190, 255
Higgins, Dr. W., i 134; ii 123
Hill, sir J., i 177, 181, 189; ii 5, 94
Hillary, i 368
Hillegas, aldn., i 417
Hindenbourg, ii 73
Hipparchus, i 405
Hippocrates, i 318, 352
Hire, de la, i 62, 80
Hirt, prof., ii 256; iii 179
Hitt, ii 102
Hoadley, Dr. Ben., iii 45, ib. note
Hobbes, ii 176, 207, 208
Hodges, ii 44
Hodgson, Dr., ii 257 note
Hoest, ii 48
Hoffman, Dr. F., i 199, 266, 306, 326, 327, ib. note, 328, 329, 330, 332; ii 17; iii 174
——— G. F., i 180
Hogarth, W., ii 131, 132
Holberg, baron, iii 56, ib. note
Holcroft, T., ii 388; iii 30 note, 45
Holden, S., iii 336
Holder, i 365
Hole, R., ii 232 note; iii 9
Holland, ii 62
Hollis, T., iii 221, ib. note, 336
Hollmann, i 216; ii 216
Holme, iii 196 note
Holmes, R., i 425
Holwell, J. Z., ii 270, ib. note, 275
Homberg, van, i 134
Home, Dr. F., i 276 note; ii 120
——— E., i 374
——— J., iii 42, ib. note, 53 note, 61
Homer, ii 231, 232, ib. note, 233, 235, 237, 238, 240, 374 note, 417; iii 13 note, 63, 159 note, 336, 343
——— H., ii 236

Hoogeveen, H., ii 230, ib. note
Hook, Dr., i 286, 288
Hooke, R., i 67 note; iii 100
Hooker, ii 295; iii 188
Hoole, J., iii 12
Hope, prof., i 124, 172, 180, 199
Hopkins, iii 188
——— Dr., iii 267, 339
Hopkinson, Fran., iii 215 note
——— T., i 27; iii 214 note, 215
Horace, ii 236, 239, 240; iii 28, 159 note, 336, 343, 354
Horn, van, i 263
Horne, bish., i 18, 381
Horneman, ii 50, ib. note
Horsefield, Dr., i 181
Horsley, bish., ii 205
Hosack, Dr. D., i 187 note, 429
Hospital, l', ii 75
Houbigant, C. Fran., ii 244
Houdon, ii 140
Houghton, ii 49
Houstoun, i 182
Howard, J., i 364, ib. note
——— Ph., i 223, 226, 227 note, 228, 240 note
Howe, iii 243
Howell, ii 62
Huddart, ii 62
Hudson, i 172, 181
——— J., ii 261, 277
Huet, ii 235
Hufeland, i 348; iii 174
Hugolinus, B., iii 217 note
Hulme, Dr., i 377
Humboldt, von, i 33, 125, 178, 421; ii 94, 97; iii 173, 174
Hume, Dav., i 9 note; ii 174, ib. note, 175, 176, 177, 180, 185 note, 195, 200, 201, 205, 214, 215, 297, 301, 303, 344, 345; iii 129 note, 175
Humpage, i 268
Humphreys, iii 68
Hunt, Dr., ii 256
Huntingdon, countess of, iii 242 note
Hunter, ii 278
——— capt., ii 39
——— Dr. And., i 309
——— ——W., i 148, 150, 266, ib. note, 268, 271, 275, 287, 306, 363, 370, 373, 377
——— J., i 148, 266 note, 275, 304, 305, 306, 370, 373, 375, 389
Hutcheson, Dr. Fran., ii 215
Hutchins, ii 56, 62
Hutchinson, gov., ii 352; iii 249 note
——— J., i 15, 16, 18, ib. note, 209, ib. note, 356 note, 379, 381, 382; ii 244, 248
——— T., iii 247
Hutton, Dr. C., i 42, 44 note, 244; iii 115
——— —— J., i 222, ib. note, 223, 248
Huxham, Dr., i 368; ii 8 note
Huygens, i 64; ii 68, 77
Huysum, ii 135
Hyde, Dr. T., ii 242, 264

I.

Iffland, iii 55, 178

Ihre, prof. J., ii 319, 320, 325
Ilinski, iii 6
Imlay, G., ii 58, 62
Inchbald, Mrs., ii 389; iii 46, 132 note
Ingenhousz, i 30, 121, 125, 178, 308, 383, 384, 418; ii 94, 96; iii 174
Inglis, Dr., iii 236 note
Inokhodzof, iii 162
Irodionof, iii 162
Irvine, Dr., i 118, 133
Isle, de l', i 132, 420; iii 155
—— Romé de l', i 195, 196; ii 76; iii 155
—— Wm. de l', ii 61, ib. note
Isocrates, ii 236, 239
Isœus, ii 239
Israeli, d', ii 371 note, 388
Ivanof, iii 163

J.

Jackson, Dr., i 362, 368
Jacob, Giles, iii 115
Jacquin, prof., i 59, 135, 182; ii 94, 97; iii 173, 174
Jakob, prof., ii 202
Jallabert, i 26, 28; ii 96
Jamison, i 197
Jauffret, i 147
Jauvenet, ii 128, 130
Jay, J., iii 242 note, 270
Jefferson, T., i 162 note; ii 58, 62, 78, ib. note, 326; iii 103, 248
Jenisch, D., ii 324
Jenner, Dr., i 357, 358 note
Jenty, i 271
Jervas, ii 128, 137, ib. note
Jones, Dr. J., ii 17, 19, 20
Jones, rev. W., i 18, 381
—— sir W., i 179; ii 45, 51, ib. note, 239, 260, 261, 265 note, 266, ib. note, 267 note, 272, 273, ib. note, 274, 275, ib. note, 276, 277, 278 note, 284, 288
—— Wm., i 52, 84
—— —— (F.R.S.), ii 74
Johnson, Dr. S., ii 238 note, 239 note, 294, 296 note, 297 note, 298, ib. note, 299, 307, 308, ib. note, 309, 364, 365, ib. note, 366, 367 note, 376 note, 387, ib. note, 396 note; iii 3 note, 14 note, 15 note, 20, 25, 28, 30 note, 39 note, 42, 49, 63 note, 71, 84 note, 85, 86, 89 note, 296 note, 297 note, 298 note, 299 note, 317 note
—— H., ii 17
—— rev. Dr. S., ii 259; iii 218, ib. note, 219, 235
Jomelli, i 151
Jortin, Dr. J., ii 365
Juan, don, i 72; ii 31
Jukes, ii 144
Juncker, i 134, 324; iii 174
—— iii, 74
Junius, ii 300, ib. note
Jurin, i 62
Jussieu, B. de, i 159, 175, 182
Justin, ii 237
Juvenal, ii 239; iii 20, 25, 28, 353

K.

Kalm, prof., i 163, 183, ib. note; iii 276 note

Kals, rev. J. G., ii 258 note
Kames, lord, ii 165; iii 63 note
Kang-Hi, ii 284
Kant, Im., ii 195, ib. note, 197, 198, 199, 200, 201
Karamsin, iii 6, 7, 163
Karsten, i 200
Karstner, prof., i 30; ii 115
Kastner, A. G., iii 19, 173, 177
Kauffmann, Ang., ii 135, ib. note
Keefe, J. O', iii 48
Keill, Dr. J., i 238, ib. note; ii 69 note, 74
—— —— Jas., i 285, 315
Keir, i 102, 103, 115, 117, 124
Keith, i 132
—— G., iii 197, ib. note
Kellgren, iii 6, 56
Kelly, Hugh, iii 46
Kempis, Thomas a, iii 193 note
Kendal, i 63; ii 123 note
Kennet, Dr., iii 196 note
Kennicot, Dr. Ben., ii 252, ib. note, 253, ib. note, 254, ib. note, 255 note
Kenrick, Dr. W., ii 305, 309; iii 76
Keogh, i 182
Kepler, i 69; ii 68; iii 283
Ker, ii 120
Keralio, mlle., ii 349
Kerguelen, ii 37, 42
Khailof, iii 163
Kheraskof, ii 322; iii 6, 12, 163
Kilgour, Rob., iii 334
Kindersley, N. E., ii 278
King, E., i 219 note
Kinnersley, Ebe., i 27; iii 215, 216 note
Kinsley, Apollos, ii 219
Kipling, Dr. T., ii 118
Kippis, Dr. And., ii 362
Kirwan, R., i 58, 103, 104, 115, 118, 124, 129, 194, ib. note, 199, 200, ib. note, 232, ib. note, 233, 234, 236, 238 note, 239 note, 241 note, 243, 249, ib. note, 251, 254, 257, ib. note; ii 95, 96
Kissam, Dr. R., ii 21
Klaproth, i 124, 126, 192, 199, 201, 256; ii 3; iii 174, 290
Kleeman, i 158
Klein, ii 363
—— J. T., i 144, 146, 156, 159; iii 178
Kleist, von, i 125; iii 4, 22, 30, 178
Klewberg, i 320
Klingenstierna, i 89
Klinger, iii 55, 176
Klopstock, ii 316; iii 4, 5, 10, 11 note, 22, 36, 55, 71, 171, ib. note, 177, ib. note, 178
Klugel, i 89
Knaut, Christopher, i 166; iii 173
Kneeland, Sam., iii 91
Kneller, ii 128
Kniæshnin, iii 163
Knight, Dr. G., i 37, 39, 396, 397; ii 83
—— R. P., ii 102
Knox, Dr. Vic., iii 114

Kœmpfer, i 182; ii 46, ib. note
Kohlsky, iii 159 note
Kolben, ii 47
Korff, baron, iii 158
Koselsky, iii 162
Koslof, iii 168
Kotelnikof, iii 162
Kotoftzof, iii 162
Kotzebue, iii 55, ib. note, 178
Kratzenstein, i 28; ii 6
Krebsius, ii 236
Kreig, Dav., i 182, ib. note
Kruger, ii 216
Kuhn, Dr. Ad., ii 18; iii 237
Kunze, rev. Dr., ii 243 note, 258, ib. note, 259 note
Kuster, ii 236, 252 note; iii 178

L.

Ladd, Dr., iii 68
Lagerbring, ii 350
Lagerstroem, i 185
Laghy, ii 70, 74
Laidlie, Dr., iii 236 note
Lalande, de, i 9 note, 77 note, 78, 79, ib. note, 80, 404, 405; ii 80
——— le Français, i 79
Lallemand, ii 236, 257
Lambe, i 154, 256
Lambert, i 39, ib. note, 50, 89, 120; ii 115; iii 173
Lambre, de, i 80, 83, 404; ii 79 note
Lametherie, de, see Delametherie.
Lancey, Jas. de, ii 216, ib. note
Lancisius, ii 258
Landen J., ii 71, 73
Langhorne, Dr. J., ii 239
——— Wm., ii 239
Langle, de, ii 38
Langles, ii 284
Lantier, ii 358
Laptief, ii 29
Larcher, ii 240
Latham, i 152
Lathrop, Dr., iii 268
Latrobe, ii 57 note
Latta, Jas., iii 215 note
Lavater, rev. J. C., ii 159, 160; iii 171
Lavoisier, i 52, 103, 104, 106, 107, 108, 109, 110 note, 111, 112 note, 118, 122, 123, 124, 183, 245, 248, 288, 289, 290, 291, 292, 295, 349, 418, 419, 421; iii 263, 290, 348
Lawrence, ii 134
Lawson, i 197
——— Dr. I., ii 56, ib. note
Lax, i 89
Lazzarini, ii 314
Leak, Dr., i 365
Leber, i 271
Ledyard, J., ii 49, ib. note
Lee, Arthur, iii 248
—— miss, iii 46, 132 note
Leeuwenhoeck, i 263, 309, 319, 320
Leiberkühn, i 68
Leibnitz, i 19, 20, 109, 388; ii 68, 69 note, 73 note, 74, 185, ib. note, 188, 192, 205, 212 note, 214, 330; iii 155, 168, 173
Leigh, E., ii 255
Leisewitz, iii 55, 178

Leland, ii 238
Lempriere, J., ii 268
——— W., ii 48
Lennox, Mrs. Char., iii 131
Lenoir, i 86
——— Alex., ii 142 note
Lennep, J. D., ii 229, ib. note, 333
Leontief, iii 164
Leopold, ii 320; iii 6
Lepechen, ii 53; iii 161
Leske, N. G., i 159, 200; iii 173
Leslie, Rob., ii 78 note
Less, iii 172
Lesseps, ii 45
Lessing, G. E., ii 316, 389 note; iii 5, 55, 170, 171, ib. note 178
Lettsom, Dr., i 181, 367
Levesque, ii 240
——— mlle., iii 34
Levita, Elias, ii 244
Levitsky, iii 163
Lewis, ii 62
——— Dr. W., i 197; ii 5
——— E., iii 28
——— N. G., ii 385
——— XIV, ii 235; iii 100
——— XV, i 72
Lichtwehr, iii 178
Lidner, ii 320; iii 6
Lieutaud, i 274, 346, 368; ii 5
Lightfoot, i 181
Lind, Dr., i 33
——— J. H., i 352, 359, 363, 368; ii 33
Lining Dr. J., ii 16; iii 228, ib. note
Linn, Dr., i 58, 252
Linn, J. Blair, iii 239 note, 268, 271 note
Linnæus, i 141, 143, 144, 145, 146, 152, 153, 154, ib. note, 155, ib. note, 156 note, 157 note, 158, 160, 161, 167, 169 note, 170, 171, ib. note, 172, 173, 174, 175, 178, 179, ib. note, 182, 184, note, 185, 186 note, 189, 194, 198, 350, 428; ii 3, 105, 123 note; iii 231 note, 232 note, 290
Linwood, miss, ii 139
Lisle, de, *see* Isle, de l'
Littlebury, ii 238
Livingston, P. V., iii 205 note
——— Rob. R., ii 107, 123 note
——— Dr. W., iii 235, ib. note, 247
Livy, ii 236, 239; iii 336, 343
Lobo, ii 48
Locke, J., i 11, 13; ii 166, ib. note, 167, 168, 169, 170, 172, 174, 175, 178, ib. note, 180, 183, 190, 192, 200, 214, 295, 330; iii 197, 208 note, 337, 339, 348
Loesner, ii 236
Logan, iii 21
——— Dr., ii 107
——— Jas., i 170 note, 406, 412, 415, 416 note; iii 198, ib. note, 268
Lomonozof, ii 321; iii 6, 157, ib. note, 158, 163
Long, ii 120
——— Dr., i 84
——— J., ii 57, 325
Longalius, ii 237

Longinus, ii 236, 239; iii 343
Loowenoern, i 89
Loskiel, G. H., ii 57 note
Lossius, ii 216
Lotharius, emp., iii 317
Loureiro, i 182
Low, J., iii 114 note
Lowitz, prof., i 120, 121, 122
Lowth, bish., ii 246, ib. note, 256, 257 note, 306; iii 336
Loyart, ii 50
Lubbock, Dr., i 127
Luc, J. A. de, i 52, 58, 132, ib. note, 219, ib. note, 221, 222, 237, 244, ib. note, 245, 248, 251, 252, 420; ii 205
Lucan, ii 237, 239, ib. note; iii 13
Lucas, ii 49
Lucian, ii 236, 238; iii 343
Lucretius, i 6; ii 235 note, 237
Ludolf, Dr., i 25; iii 173, 179
Ludwig, C. G., i 148, 174, ib. note, 197, 370; iii 173
Lulolff, i 235
Luther, iii 167 note
Lye, ii 325
Lyonet, i 67, 157, 276 note
Lysias, ii 236
Lyttleton, lord G., ii 347, 355 note, 374 note; iii 35

M.

Maas, prof., ii 202
Macartney, lord, ii 44
Macauley, Mrs., *see* Graham, Mrs. C. M.
Macbride, Dr. David, i 350, 363; ii 120
M'Clinch, ii 112 note
M'Culloch, i 37; ii 84
M'Dowell, J., iii 204 note, 347
Macfarquhar, Col., iii 112
M'Kean, gov. Jos., iii 269, 339
Mackenzie, ii 381
———— sir Alex., ii 57, ib. note
Macklin, C., iii 46
Maclaurin, Col., i 48; ii 73, 74, 75
Maclean, Dr., iii 263
Maclurg, Dr., ii 24
Macpherson, Jas., iii 10, 62, 63, ib. note
Macquart, i 197
Macquer, i 63, 101, 105, 109, 118, 123; ii 121; iii 115
Madan, M., ii 239
Madison, Dr., i 90, 251; iii 224, 246, 262, 270, 348
Maffei, ii 314; iii 53, ib. note
Magaw, Sam., iii 215 note
Magellan, J. H. de, i 85, 189 note; iii 329
Magnol, i 166, 182
Mahon, lord, i 31
Mailla, J. M. de, ii 284
Maillet, i 212, 213
Maimbray, i 26, 384; ii 96
Mairan, de, i 248, 249, 253
Makin, T., iii 198
Malebranche, ii 170, 171, 173, 176, 183, 185 note, 192
Malespina, don, ii 40, 59, 62
Malgyn, ii 29
Mallet, i 89
———— Dav., ii 325, 365; iii 15 note
Malmesbury, lord, ii 331 note

Malo, don G., ii 240; iii 13
Malone, E., ii 134 note; iii 49, 66 note, 67 note
Malpighi, i 143, 147 note, 175, 263
Malthus, iii 148 note
Manfredi, i 89; ii 73
Mannevillette, d'Aprea de, i 418; ii 62
Manning, Dr., i 377
——— rev. Dr. Jas., iii 242, ib. note, 340
Mansfield, Jared, ii 81 note; iii 261
——— lord, i 403
Maratti, i 180
——— C., ii 128, 130
Marchand, capt. Steph., ii 41
Marchesi, ii 152; iii 53
Marck, la, i 175, 182
Maresch, J. A., ii 151
Margraaf, i 122, 124, 126, 190, 191, 199, ib. note, 201; ii 143; iii 174
Marigni, abbé, ii 261
Marini, ii 313
Marion, ii 37, 51
Mariotte, i 120, 251
Mariti, abbé, ii 43
Marivaux, ii 378, ib. note; iii 52
Marmontel, ii 379; iii 52
Marsden, W., ii 46, 276, 323
Marshall, i 184; iii 264, 277 note
——— capt., ii 89
——— W., ii 103
Marpurg, ii 148
Marsh, Eb. G., ii 257 note
Marsigli, Lew., i 155
Martelli, P. J., ii 314; iii 52
Martens, iii 348
Marti, de, i 134, 421
Martin, B., i 67; iii 348
Martine, Dr. G., i 132 note
Martini (musician), ii 151
——— (painter), ii 130
Martyn, J., ii 239
——— prof. T., i 172, 181; iii 115
Marum, Dr. van, i 34, 391, 394
Mary, queen, iii 348
Mascagni, i 270, ib. note
Maschalof, iii 163
Masclef, ii 244, 249
Maseres, Fra., ii 72, 74
Maskelyne, Dr., i 79, 82, 404; ii 84
Mason, C., i 80, 82
——— Dr., iii 286 note
——— W., ii 365, 366; iii 16, 35, 42, ib. note, 66 note
Massie, T., i 426
Masson, i 179
Matthæi, C. F., ii 231, 252 note; iii 178
Mather, Dr. Cotton, i 355; iii 188, 189 note, 241 note, 317 note
Mattaire, ii 236
Mauduit, i 160
Maupertuis, i 72
Maurice, rev. T., ii 278, 286 note, 288; iii 32
Mawe, T., iii 115
Maxcey, Dr., iii 344
Mayer, prof. Tob., i 73, 79, 80, 82, ib. note, 117, 249, 404, 405; ii 95; iii 173

Mayhew, Dr. Jon., iii 234, ib. note
Mayow, Dr., i 93, 97, 103, 286, ib. note, 288
Mead, i 324
Meares, ii 29 note, 39
Mechain, i 78, ii 79 note
Meckel, J. F., i 268, 271; iii 174
——— jun., i 272
Medici, Lorenzo de, ii 365
Medicus, i 179
Meiners, prof., i 149; ii 350, 364; iii 169
Meissner, Dr. J. H., ii 254
Melanderhielm, i 89
Mellin, ii 202
Melmoth, W., ii 239, 298
Melville, i 62
Menander, iii 315 note
Mendelssohn, Moses, ii 216; iii 170
Mengs, ii 130
Menin, ii 29
Menzies, i 289
Menzini, Bened., ii 313
Merian, M. S., i 156, ib. note, 184; iii 173
Merkenius, iii 74
Merrick, Jas., iii 21
Mesmer, i 40, ib. note; ii 14
Messier, i 78, 405
Metastatio, ii 149, 151, 314, 365; iii 36, ib. note, 47, 53
Metherie, de la, *see* Delametherie.
Meusel, iii 175
Meyer, i 105, 124, 135; iii 174
Michaelis, Dr. C. B., ii 250, 255, 261; iii 179
Michaelis, J. H., ii 250, 255, 256, 261; iii 179
——— prof. J. D., ii 245, ib. note, 250, ib. note, 255, 261; iii 179
Michaux, A., i 180, 185, 428
Michel, rev. Mr., i 396, 397
Micheli, i 166, 179, 182
Michelotti, i 47
Mickle, W. J., iii 12, 13 note
Middleton, ii 60
——— ii 96
——— capt., ii 31
——— Dr. Conyers, ii 298, 365
——— ——— Peter, ii 19, 20
Mill, Dr. J., ii 251, 252 note
Miller, Dr., ii 25
——— Ph., i 170, 181; ii 102 note, 103, ib. note; iii 115
Milles, dean, iii 65 note
Millot, C. F. X., ii 348, ib. note
Milne, Rob., i 221, ib. note, 222
Milton, ii 295, 367 note, 417; iii 1, 3, 8, 9, 10 note, 11 note, 29, 36, 70, 72, 170, 296 note, 297 note
Minot, G. R., ii 354, ib. note
——— judge, iii 105 note
Minto, Dr. Walt., iii 262, ib. note
Mirabaud, iii 144
Mirkhond, ii 268
Mitchel, i 39, 61, 382, 396, 397
Mitchell, Dr. J., i 147, 183, ib. note; ii 16, ib. note,

58; iii 232, ib. note, 276 note
Mitchell, J. S., i 426
Mitchill, Dr. S. L., iii 263, 264
——— prof., i 128, 129, 130 note, 162 note, 202; ii 24, 25, 107, 403
Mitford, W., ii 347
Moehring, P. H. G., i 153 note
Mohrenheim, iii 163
Moitt, la, ii 140
Moivre, de, ii 71
Moliere, ii 132; iii 52, 54 note
Molini, don, ii 59
Molyneux, i 60
Monboddo, lord, ii 193, 194, 214, 230, ib. note, 329, ib. note, 334, 335, 342 note; iii 16 note
Monet, ii 146
Monge, i 134, 194
Monis, Jud., ii 259
Monnet, i 134, 197, 256
Monnier, le, i 72, 80, 86, 173, 405
Monro, 1st Dr. A., i 148, 265, ib. note, 275, 306, 370; ii 10
——— 2d Dr. A., i 148, 156, 265 note, 271, 272, 275, 306
——— 3d Dr. A., i 148, 265 note, 266, ib. note, 268, 270, 272, 273, 283, 306, 371
——— Dr. Don., i 363
Mons, van, i 117
Montague, lady M. W., i 354; ii 54
Montague, Mrs., iii 131
Montausier, ii 235
Montesquieu, iii 348
Montgolfier, J., i 54, 55
——— Steph., i 54, 55
Monti, iii 53
Monval, iii 52
Moor, Josh., iii 241 note
Moore, ii 140
——— ii 239
——— capt., ii 31
——— Dr. Ben., iii 342
——— —— J., ii 381, 382
——— E., iii 42
——— J., i 425
——— prof., iii 351
More, miss H., iii 43, 119, 124, 132, 139 note
Moreri, iii 110
Morgagni, i 273, 274
Morgan, Dr. J., ii 18; iii 236, 237
——— W., i 384; *ii 72*
Morghen, ii 146
Moritz, iii 169
Morland, G., ii 135
Moro, abbé, i 210, 216
Morone, ii 313
Morovief, ii 29
Morrell, ii 239
Morris, Ant., iii 198
——— C., i 425
Morse, Dr. Jed., ii 58, 63, 336
Morton, Mrs., iii 68
——— T., iii 46
Morveau, *see* Guyton-Morveau.
Moschus, ii 239
Mosheim, ii 263 note, 354 note; iii 167, 171
Moss, i 377

Mott, iii 240 note
Motte, de la, iii 34, 50, 52
Moultrie, Dr. J., iii 228, ib. note
Mouzon, ii 62
Mozart, ii 148, 151
Mudge, i 65, 66
Mueller, J. G., ii 349; iii 175
——— O. F., i 160, 161, 182, 276 note; iii 173
Muhlenberg, Dr., i 184; iii 264, 276 note
Muirison, Dr., ii 8 note
Mulgrave, lord, i 243, 254; ii 34
Muller, *see* Mueller.
Muratori, ii 314
Munoz, ii 351
Munro, Dr., i 33
Muntz, ii 136
Murphy, Ar., ii 239; iii 43
Murray, Jos., iii 220, ib. note
——— J. R., ii 127 note, 138 note, 140 note
——— Lind., ii 306, ib. note; iii 124
——— prof. J. A., i 159; ii 5, ib. note; iii 174
——— sir Rob., ii 120
Musæus, iii 176
Muschenbroeck, i 39, 244; iii 348
Musgrave, S., ii 236
Mutis, don, i 185

N.

Nairne, i 52
Napier, ii 68
Nares, ii 305
Nayler, i 374
Necker, de, i 179, ib. note
Needham, i 160
Nesbit, ii 145
Neumann, i 126, 190, 201; iii 174
Nevodtsikoff, ii 30
Newcome, Dr., ii 257 note
Newcomen, i 56, 400, 402; ii 113
Newsham, ii 115
Newton, sir I., i 6, 11, 12, 15, 18, ib. note, 19, 20, 24, 41, 46, 48, 58, 59, 60, 62, 63, 64, 65, 69, ib. note, 72, 74, 93, 94, 118, 122, 131, 195, 316, 380, 382, 408; ii 68, 69 note, 70, 73, ib. note, 147, 180, 185, ib. note, 190, 192, 200, 406, 407; iii 132 note, 196 note, 197, 240 note
Nicholai, ii 389; iii 176
Nicholas, Rob., iii 248
Nicholl, Dr., ii 21
Nicholls, Dr. Fra., i 274, 324, 325, ib. note
Nicholson, W., i 34, 35 note, 134, 197, 390, 392, 395; iii 115
Nicolini, ii 152
Niebuhr, ii 44, 47, 262, 268
Nieuentyt, i 243
Nieuhoff, ii 42
Nisbet, Dr. C., i 26 note; iii 252, 345
Noble, ii 99
Noldechen, ii 100
Nollekens, J., ii 140
Nollet, abbé, i 24, 26, 28, 52, 384; ii 6, 96
Nooth, Dr., i 134
Norden, Fred., ii 47
Nordenflycht, mad. de, iii 6

Norris, ii 171, 212
——— J., iii 198
North, Mrs., i 428
Northcote, ii 134
Nuck, i 264

O.

Oddi, i 89
Oeder, i 182
Ogden, Dr. Jac., ii 17
——— J., iii 220 note
——— Josiah, iii 220 note
Ohssohn, d', ii 54
Olbers, Dr., i 89, 403
Olivet, ii 236
Olivier, i 157, ib. note; ii 54
Ommagank, ii 135
Opie, ii 134
Orford, lord, ii 132 note, 383 note, 384; iii 43, ib. note, 66 note
Oriani, i 80, 89
Orme, ii 277
Ormoy, d', i 30, 383, 384; ii 97
Orrery, C. earl of, i 84 note
——— J. earl of, ii 239, 355 note
Osbeck, i 185; ii 42
Osborn, Dr., i 377
Ossian, iii 10 note, 62, 63, ib. note
Oswald, Dr., ii 183 note, 185, 195, 404
Otis, Jas., iii 247
Otway, T., iii 41, 59
Oudenorp, ii 237
Ouseley, sir W., ii 268, 278
Outhier, i 72
Ovid, ii 237, 239; iii 159 note
Owen, iii 112
Oxenstierna, count, iii 6
Ozeretzkofsky, iii 161

P.

Page, i 90; iii 262
Pages, i 254; ii 37
Paikoff, ii 30
Pakhomof, iii 159 note
Paley, Dr. W., ii 215 note; iii 337, 348
Pallas, prof., i 146, 148, 150, ib. note, 158, 159, 161, 182, 198, 234, 236, 276 note; ii 43, 44, 45, 53, 324; iii 161, ib. note, 164
Paoletti, ii 313
Paolino, ii 273
Papin, i 400
Paracelsus, i 102, 105, 311
Parceval, de, i 89
Parker, Jas., iii 92
Parnell, Dr. T., iii 29
Parcieux, de, i 49, 50; ii 114
Parey, Amb., i 372
Park, Mungo, ii 50, ib. note
Parkhurst, i 18, 381; ii 229, 245, 249, 250
Parkinson, ii 13
Parks, W., iii 224
Parkyns, ii 144
Parmentier, i 178; ii 95, 96, 104
Parr, ii 237 note
Parsons, Dr., ii 158
Paschall, I., iii 328
Pasquin, Ant., ii 134 note
Paterson, ii 276
——— lieut. W., i 32 note, 389; ii 48

Patrin, i 194
Patterson, prof., i 85, 90; iii 262
Paulus, ii 261; iii 179
Pauw, iii 236, 282
Pavon, don, i 184
Payne, ii 60
Peale, C. W., i 152 note; ii 123
Pearce, ii 236
Pearson, Dr., i 128, 256, 358, ib. note
Pechlin, J. N., i 147 note
Peck, iii 264
Pecquet, i 263
Peithner, i 194
Pekin, iii 163
Pelletan, i 33
Pelletier, i 122
Pelloutier, ii 325
Pemberton, Ebe., iii 204 note, 267
Penn, Wm., iii 187, 197, 198 note, 231 note, 232 note
——— R., iii 213
——— T., iii 213
Pennant, T., i 145, ib. note, 146
Penzel, ii 240
Pepys, W. H. junr., i 120
Percival, Dr., iii 124
Percy, Dr. T., ii 283
Pericles, ii 357
Perizonius, Jas., ii 331
Perkins, Dr., ii 14
Pernetty, ii 158
Perolle, prof., i 59
Pérouse, la, ii 29 note, 38, ib. note, 42
Perriere, i 366
Perron, A. du, ii 265, ib. note
Perronet, i 49
Persius, ii 237, 239; iii 28
Peter I of Russia, ii 28, 43, 52, 87, 321; iii 153, 154, 156
——— II of Russia, iii 157, 158
Peters, judge, ii 107
——— R., iii 214 note
Petit, i 372
Petrarch, ii 365, 367
Petrie, Arth., iii 334
Petrof, iii 159 note, 165
Petronius Arbiter, ii 237
Peysonnel, i 159; ii 54
Pfaff, Dr., i 33, 391
Phædrus, ii 237
Philips, Amb., iii 33
Phillip, gov., ii 39 note
Phillips, hon. J., iii 242 note, 250, ib. note, 251
——— J., ii 88 note
——— Sam., iii 250, ib. note, 251
——— W., iii 250, ib. note, 251
Phipps, capt., *see* Mulgrave, lord.
Physick, Edm., iii 328
Piazzi, i 403
Piccini, ii 151
Pickbourn, Jas., ii 306
Pickering, i 58, 252
Pictet, i 118, 120, 121
Piens, Dr.,
Pierce, iii 188 note
Pike, iii 336
Pindar, ii 236, 239
——— Peter, *see* Wolcot, Dr.
Pingré, i 78, ib. note; ii 32

Pinkerton, J., ii 39 note, 47 note
Piron, iii 50
Pitcairn, Dr., i 279, 315, 318
Pitiscus, ii 237
Pitot, i 51
Pitt, Chr., ii 239; iii 13, 21
Place, de la, i 73, 75, 78, ib. note, 118, 133, 238 note, 291; ii 74
Platner, prof. J. Z., i 370
Plato, i 279; ii 156, 330, 334, 335, 357; iii 159 note
—— abp. of Moscow, iii 164 note
Platt, sir Hugh, ii 91
Plattner, prof. E., ii 202
Plautus, ii 240
Playfair, prof. J., ii 276
Plenck, i 177, 271
Plenisner, ii 45
Pleschtscheyef, iii 162
Pleyel, ii 148, 151
Pliny, i 168, 237
—— the younger, ii 237, 239; iii 352
Pluche, i 235
Plumier, i 180, ib. note, 182, 184
Plutarch, ii 236, 239, 240
Pococke, Dr. R., ii 47, 242, 262
Poiret, ii 48
Poivre, le, ii 47
Polier, col., ii 275 note
Politian, ii 149
Polotsky, iii 157 note
Polwhele, R., ii 239; iii 18, 130 note
Polybius, ii 236, 239
Pond, ii 57
Pontedera, Julius, i 166, 177
Pope, Alex., ii 238; ib. note, 297, ib. note, 306, 309, 374 note, 406; iii 2, ib. note, 3, ib. note, 10, 13, 14, ib. note, 20, 22, 23 note, 27, 28, 29, 33, 38, 48, 70, 71, 85, 170, 297 note
Popotsky, iii 159 note
Popowitsch, iii 169
Porporerti, ii 146
Porson, R., ii 236, 237 note
Porta, Bapt., ii 160
Porterfield, i 62, 272, 324
Portlock, capt., ii 39
Post, Dr. Wright, ii 21
Postlethwaite, Mat., iii 115
Potemkin, prince, ii 241; iii 164 note
Pott, Dr. J. H., i 126, 190, 191, 199, ib. note; iii 174
—— Percival, i 371, 372, 373, 374
Potter, J., ii 239
Pound, Dr., i 83
Pratz, du, ii 56
Preston, W., iii 333
Prevost, i 40, 58, 251
Price, Dr. R., ii 72, 207 note, 212, ib. note, 213, ib note, 214
—— T. D., i 425
Priestley, Dr., i 29, 31, 59, 60 note, 100, 102, 104, 106, 107, 115, 116, 117, 118, 121, 124, 125, 133, 178, 251, 288, 289, 290, 291, 293, 382, 384, 387, 418, 419, 421; ii 96, 97, 195, 205, 207, ib. note,

208, 209, 212, ib. note, 213 note, 306, 358, 359 note, 360, 369, 408; iii 263, 290, 338
Prince, rev. Dr., i 52
Pringle, sir J., i 347, 352, 363; ii 103
Prokopovitch, Theophanes, ii 321; iii 156, ib. note, 157
Prony, ii 74
Propertius, ii 237
Prosperin, i 89
Proud, Rob., ii 353; iii 199 note
Proust, i 124
Provoost, Sam., iii 220 note
Prior, Mat., iii 28, 70
Ptolemy, ii 403
Puckeridge, ii 150
Pulteney, i 169 note, 170 note, 173 note, 184 note, 186 note, 427; iii 233 note
Purcell, ii 62
Pye, Dr. S., i 235, ib. note
—— H. J., ii 238,
Pyrlæus, ii 326 note
Pythagoras, ii 156, 177

Q.

Quincy, Josiah, iii 247, 250 note, 331
Quintilian, ii 237
Quintius Curtius, ii 237

R.

Rabbus, Pet., iii 74
Rabener, G. W., iii 170, 177
Radcliffe, Mrs. E., ii 381, 382, 384; iii 132
Raimonde, ii 151
Rameau, ii 147, ib. note, 148, 151
Ramler, iii 178
Ramsay, ii 134
——— Allan, iii 33, ib. note
——— Dr. Dav., i 360 note, 376 note; ii 12 note, 15 note, 24, 99 note, 103 note, 352; iii 226 note
Ramsden, i 86
Rapin, ii 301, 343, 344, ib. note
Raspe, R. E., i 197, 216, ib. note; iii 174
Ray, i 143, 146, 163, 164, 165, 172, 210
Raynal, ii 101 note, 349, ib. note
Reaumur, i 131, 132, 157, ib. note, 158, ib. note, 276 note, 300, 420
Reboul, i 421
Redi, i 143
Redwood, Abrah., iii 212
Reed, Jos., iii 220 note
Rees, Dr., iii 111
Reeves, T., ii 137
Regnard, iii 52
Regnault, ii 131
Reisch, Dr., i 349; iii 174
Reichel, i 177
Reid, iii 75
—— Dr. T., i 62; ii 74, 168 note, 175 note, 176 note, 178, ib. note, 179, 180, ib. note, 182, ib. note, 183, ib. note, 184, ib. note, 185 note, 188 note, 195, 205, 214, 404, 406; iii 245, 348
Reil, i 348; iii 174

Reimarus, ii 236
——— H. S., ii 202
Reinhard, iii 172
——— J. P., iii 175
Reinhold, prof. C. L., ii 202
Reischius, iii 109
Reiske, J. J., ii 236, 262; iii 178, 179
Reitzenstein, iii 55
Reitzius, ii 236
Relhan, i 181
Reland, Adr., ii 250, 261, 262
Remer, iii 175
Renaudot, ii 261, 269, 281
Rennel, major Jas., ii 44, 61, 277
Renovantz, iii 161
Ressons, i 41
Reyer, i 251
Reynolds, F., iii 46
——— sir Josh., ii 129, 130, 132 note, 133, 134, ib. note, 138 note, 300, 301, ib. note
Riccard, ii 240
Riccoboni, mad., ii 379
Richardson, ii 120
——— J., ii 268
——— Jon., ii 128
——— Sam., ii 374, ib. note, 375, 376, ib. note, 377, 382, 397 note
Richelet, ii 311
Richter, ii 151
——— ii 389; iii 176
——— N. G., iii 173
Ridgely, Dr. F., ii 23
Ridley, ii 251, 387
Ring, i 358
Rinman, i 198; iii 115
Rittenhouse, Dr. Dav., i 60, 85, ib. note; ii 69 note, 74, 123; iii 103, 240, ib. note, 261, 266, 328
Ritzema, Rud., iii 220 note
Rivinus, i 163, 164, 166
Roan, iii 200
Robert, ii 61
Roberts, i 55
Robertson, Abram, ii 75
——— Archib., ii 144 note
——— Dr. W., ii 44 note, 64 note, 271 note, 301, 345, ib. note, 346; iii 175
——— prof. J., ii 245, ib. note, 249
Robins, Ben., i 42, 43, 359 note; ii 32 note
Robson, i 181
Roche, de la, iii 75
Rochefort, ii 240
Rochette, ii 61
Rochon, ii 51
Rochow, iii 124
Rodgers, Dr., iii 236 note, 244 note
——— J. R. B., ii 21
Roederer, i 271
Roemer, i 89
Roesel, i 154, 158, 276 note; iii 173
Rogers, capt. Woodes, ii 30
——— Dr., iii 202 note
——— Pat., i 425
——— Sam., iii 32
Roggewein, com., ii 31
Rohr, van, i 180
Roi, du, i 180
Rollin, ii 347, ib. note; iii 118

Rolt, iii 115
Romain, i 55 note
Romney, ii 134
Romofsky, iii 158
Roque, le, ii 261
Rosa, Salvator, ii 313
Roscelinus, ii 420
Roschlaub, i 348; iii 174
Roscoe, W., ii 365, ib. note
Rosenhof, i 158
Rosenmuller, E. C., ii 262
Ross, Alex., ii 263
Rossi, J. B. de, ii 251, 253, 254 note, 255 note
Roubilliac, ii 140
Rouelle, i 123
Rouland, i 30, 383
Rousseau, J. B., iii 36
——— J. J., ii 311, 379, 380 note; iii 117, 348
Roussier, ab., ii 148
Rowe, Nic., ii 239; iii 13, 14 note, 33, 41, ib. note, 48, 60
Rowley, i 84 note
——— T., iii 64, 65, ib. note, 66, 67
Rowning, J., i 52; iii 348
Roxburgh, i 182
Roy, gen. W., i 52
—— le, i 44, 83, 244, 384; ii 32
Royen, van, i 174
Rozier, abbé, i 383, 384; ii 97, 104
——— P. de, i 54, 55 note, 383
Ruæus, ii 235
Rubens, ii 128
Rubinelli, ii 152
Ruckert, ii 96
Rudbec, i 263, 265
Ruddiman, ii 236
Ruhnkenius, D., ii 229, 232, ib. note, 236; iii 178
Ruiz, don, i 184
Rumford, count, i 43, ib. note, 53, 118, 119, ib. note, 120, 121, 398, 399; ii 98; iii 250 note, 292, 330, 331
Rumofsky, iii 161, 162
Rumphius, i 182; ii 46 note
Rush, Dr., i 85 note, 330 note, 347, 362, ib. note, 865; ii 8, 16 note, 19, 24, 69 note, 99, 403; iii 237, 240 note, 251, 263, 265
Russell, i 52
——— Dr. Pat., i 154, ib. note
——— W., ii 347, 355
Rutherford, Dr., i 104, 132
Rutherforth, Dr. T., iii 348
Ruysch, i 264, 265, 273
Ryer, du, ii 263, 264
Ryland, ii 144, 146
Rysbrach, ii 140

S.

Sabbatier, i 33, 271
Sack, iii 172
Sacy, de, ii 261
Sade, ab. de la, ii 367
Sagar, J. B., i 350; iii 174
Sage, i 105, 117, 124, 126, 195
—— Alain Rene le, ii 378, ib. note; iii 50
St. Andre, i 264
St. Foix, iii 52
St. John, Dr., i 110 note, 134
St. Pierre, B. de, i 49, 73 note; ii 51, 389

Salamon, ii 151
Sale, G., ii 264
Sallo, Den. de, iii 14, ib. note
Sallust, ii 233, 234, 237, 239, 240; iii 336, 343
Salmon, ii 60, ib. note, 63
——— Rob., ii 138
Salzmann, C. G., iii 124
Samoilovitch, iii 162
Sanadon, ii 240
Sanctorini, i 275
Sandby, ii 144
Sargent, iii 18
Sarragin, i 162, ib. note
Sauer, Mart., ii 41 note
Saurin, iii 50, 51
Saussure, de, sen., i 120, 123, 177, 231, ib. note, 237, 245, 246, 248, 252
——— jun., i 177, 198
Sauvages, F. B., i 28, 173, 175, 350
Sauvebœuf, ii 44
Savage, R., iii 31
Savary, capt., i 56, 396, 401
——— Jas., iii 115
——— mons., ii 47, 264
Scaliger, ii 366 note
Scarpa, prof., i 271, 272
Schaddau, ii 140
Schæffer, i 199
Schafer, i 158
Scheele, C. W., i 99, ib. note, 103, 104, 105, 107, 118, 120, 124, 126, 134, 191, 192, 199, 201, 254, 288, 349, 419, 421; ii 3, 143; iii 290
Scheid, Ev., ii 229, 230
Scheuchzer, i 180, 235; ii 46 note
Schiller, ii 316, 349, 350, 363; iii 55, ib. note, 175, 176, 178
Schilter, ii 325; iii 168
Schlegel, J. E., iii 22, 55, 167, 178
Schlepper, iii 163
Schluter, ii 240
Schmid, prof., C. C. E., ii 202
Schmidt, ii 349; iii 175
Schneider, i 154; iii 178
Schœpf, i 154, 163, 189, ib. note; iii 276 note
Schoonark, iii 4
Schranck, i 159
——— F. von P., ii 363
Schreber, i 179, 180; iii 173
Schrevelius, ii 255
Schrœder (chem.), i 194
——— (dramat.) iii 35, 178
——— (orient.) ii 255; iii 179
Schroeter, J. J., i 79, ib. note; iii 173
Schubert, i 80
Schubin, iii 163
Schultens, Alb., ii 229, 243, ib. note, 250, 261, ib. note, 262, 332
Schultz, Dr., i 181
Schumliansky, iii 162
Schutze, ii 240
Scopoli, i 156
Scott, ii 63
Scrofani, ii 54
Scudery, mad., ii 372
Scull, ii 62
Seabury, Dr. Sam., iii 295, ib. note, 268, 333, 334
Search, E., ii 245 note
Seba, Albt., i 141
Sedaine, iii 52

Seguin, i 134, 289, 421; ii 120, ib. note
Seiler, Dr. G. F., iii 172
Sejour, i 89
Selle, prof., ii 202
Senac, i 368
Seneca, ii 239
Senger, ii 123 note
Sennebier, i 125, 177, 384, 418; ii 94, 96
——— ii 363
Sergeant, J., iii 241 note
Sergel, ii 140
Sestini, ii 54
Sewall, Steph., ii 259
Seward, miss A., ii 389; iii 37, 39, 132
Shakspeare, ii 295; iii 8, 41, 44, 47, 48, 49, 57, 58, 67 note, 70, 71, 296 note
Shaftesbury, ii 297
Sharp, Abr., ii 74, 80
——— S., i 370
——— T., ii 245, 256
——— Wm., ii 146
Shaw, Dr. T., ii 43, 47
——— W., ii 325
Sheldon, i 270
Shelvocke, ii 30
Shenstone, W., iii 33, 39, ib. note
Shepherd, i 80
Sherard, Dr., iii 229 note
Sheridan, Mrs., ii 389; iii 132
——— R. B., iii 45, 46
——— T., ii 305, 306, 309, 365
Sherlock, Dr. T., ii 298; iii 334
Sherwin, ii 80
Shippen, Dr. W., ii 18, 19; iii 236
Shippen, E., iii 198, ib. note
Shore, sir J., *see* Teignmouth, lord
Short, i 65, 86
Shortland, capt., ii 39
Shuckburgh, sir G., i 52, 243; ii 78 note
Sibthorp, Dr., i 183
Sicard, i 366
Siderofsky, iii 159 note
Sidney, sir Phil., ii 294
Silius Italicus, ii 237
Simmons, Dr., i 270
Simon, ii 146
——— fath., ii 330
Simpson, T., i 44, 73; ii 72, 73, 74
Simson, i 324
——— Sol., ii 252 note
Sinclair, sir J., ii 104, 355, 356
Siretuschkin, iii 162
Sisson, i 86
Six, i 182
Skinner, J., iii 384
Skorodumof, iii 163
Skurahoff, ii 29
Sloane, sir Hans, i 150, 172, 182, 185, ib. note, 186 note; ii 7, 46 note; iii 229 note
Smart, Christopher, ii 239
Smeaton, J., i 37, 46, 50, 52, 252; ii 84, 89, 114
Smellie, Dr., i 376, ib. note, 377
Smith, Dr., i 61, 62, 66
——— Ad., ii 215; iii 348
——— Elihu H., ii 25, ib. note
——— Jas., ii 19, 20
——— J. E., i 143 note,

158, 167 note, 175 note, 181, 182, 427
Smith, Dr. Nath., ii 23
——— — S. S., iii 247, 268, 345, 349
——— (engraver), ii 144
——— Josiah, iii 227, ib. note
——— Mrs. Char., ii 381; iii 37, 124, 132
——— rev. Dr., i 147, 148 note; iii 238, 240
——— ——— W., iii 214, ib. note, 236, 328
——— — Mr., i 403
——— — W., ii 351, 352; iii 225
——— S., ii 352
——— T., ii 135
——— W., ii 238, 239
——— — (of Connecticut), iii 205 note
——— — (of New York), ii 352
——— — Peartree, iii 205 note
Smollet, Dr. Tob., ii 298, 344, ib. note, 345, 377, ib. note, 382
Smyth, capt., ii 31
Snakenburg, ii 237
Socrates, ii 156, ib. note, 357
Soemmering, i 148, 272, ib. note, iii 173
Solander, Dr., i 186; ii 33, 36 note
Solokof, iii 161
Somerville, lord, ii 105
——— W., iii 17
Sonnerat, ii 46, 284, 323
Sonnini, ii 47
Sophocles, ii 236, 239
Sotheby, Wm., iii 11 note, 32
Sottzman, ii 61
Soulavie, ab., i 197, 235
Southern, T., iii 44, 51
Southey, Rob., iii 9, ib. note, 34
Sower, Christopher, iii 258
Sowerby, i 181
Spalding, Dr. Lyman, ii 23
——— J. J., iii 171
Spaletti, ii 236
Spallanzani, i 159, 160, 177, 198, 276, 300, ib. note, 302, 308, 310
Spandonck, ii 135
Sparrmann, Dr., i 153, 186, 254; ii 48, ib. note
Speechly, ii 102
Spencer, Edm., iii 70
Spielmann, ii 5
Spinoza, ii 207, 208
Spitzenbergen, ii 240
Sprat, bish., ii 295
Sprengel, M. C., iii 175
——— prof. K., ii 358; iii 173
Stade, von., iii 168
Stahl, G. E., i 95, ib. note, 96, 97, 105, 108, 109, 113, 118, 316, 322, ib. note, 324, ib. note, 325, 326, 327; ii 189; iii 174
Stamitz, ii 151
Starke, iii 277 note
Statius, iii 353
Staunton, sir G., ii 44, 284
Stavorinus ii 44, 46
Stedman, ii 59
Steele, sir R., i 84; ii 319; iii 44, ib. note, 60, 84, 196 note
Steinbach, iii 168
Steno, i 263

Stephenopoli, ii 54
Sterne, i 382, ib. note, 383 note
Stevens, Dr. E., i 303
Stevenson, iii 200
Stewart, Dr. Math., ii 70
——— prof. Dug., ii 64 note, 180 note, 182 note, 184, ib. note, 214, 345 note, 406; iii 19 note, 348, 354
Stiles, Dr. Ezra, iii 223 note, 270, ib. note
Stirling, ii 70, 74
——— lord, *see* Alexander, W.
Stock, Chris., ii 251, 255
Stoever, i 170 note, 172 note, 184 note, 187 note
Stolberg, iii 178
Stone, iii 188
Storch, H., iii 165 note
Storck, i 368; iii 174
Storr, ii 251, 261
Stoughton, hon. W., iii 335
Strange, ii 146
Stralenberg, ii 43, 323
Street, Wm., i 203 note
Strong, Dr., iii 268
Stuart, Gilb., ii 134, ib. note, 155, 347; iii 266
Stubbs, i 276 note
——— ii 135
Sturm, iii 172
Stuyvesant, gov., iii 216 note
Sue, i 272
Suetonius, ii 237
Suhm, P. F., ii 350
Sulivan, R. J., i 205 note
Sullivan, Jas., ii 58, 353
——— judge, iii 105 note
Sully, H., i 83
Sulzer, i 158
——— J. G., i 32
Sumorokof, ii 321; iii 6, 56, 163
Surville, ii 37
Sussmilch, J. P., ii 380
Suyef, iii 161, 162
Swab, van, i 191, 198
Swammerdam, i 156, 263, 264
Swankhardt, i 384
Swartz, i 178, 182, 185
Swieten, van, i 352, 376 note; ii 15 note; iii 174
Swift, Dr. Jon., ii 296, ib. note, 297, 306, 365, 374 note, 386; iii 23 note, 24, ib. note, 25 note, 170
Swinden, van, i 39, 132 note
Sydenham, i 313, 318, 350, 351
Sylvius, i 262, 313
Symmer, i 28, 385
Symmes, ii 45
Synd, lieut., ii 30
Syng, Phil., iii 215

T.

Tacitus, ii 236, 239, 240, 338; iii 132 note, 352
Tagliazucchi, ii 314
Tartini, ii 148
Tassie, Jas., ii 141
Tasso, ii 313; iii 12
Tate, Nahum, iii 21
Tatham, i 181
Tavernier, ii 268
Taylor, Dr. Brooke, ii 70, 73, 74, 80
——— J., ii 236
Teignmouth, lord, ii 267, 278

Temple, sir W., ii 295
Tenevelli, ii 364
Tennant, Dr., ii 9, 15
——— Smithson, i 122, 123; ii 96
——— W., iii 199, 200 note, 202 note
Tennent, Dr. J. V. B., ii 19, 20
——— Gilb., iii 267 note
Terekhofsky, iii 162
Terence, ii 237, 239; iii 132 note, 336, 343
Ternay, de, iii 331
Tessier, abbé, i 121; ii 96, 104, 105
Testa, prof., i 405
Testalini, ii 146
Tetens, ii 216
Thatcher, rev. Dr., iii 105 note, 223 note
Thelford, ii 114
Thenard, i 34
Theobald, Lew., iii 48
Theocritus, ii 236, 239, 240; iii 34
Theophrastus, ii 157
Thomas, Dr., ii 8 note
——— G., i 425
——— Isaiah, iii 259
——— Mrs., iii 132 note
Thomasius, Chr., ii 315; iii 167
Thompson, Ben., *see* count Rumford.
——— Hedge, i 425
——— Jas., iii 29, ib. note 30, ib. note, 35, 42, 71, 72
Thomson, C., iii 269, 328
——— Dr. T., i 103, note, 106 note, 134, 201 note, 247 note, 288 note, 420, 422
Thomson, miss, ii 139
Thornhill, sir Jas., ii 128
Thornton, Bon., ii 240
——— Dr., i 187, 350
Thouvenel, i 134
Threlkeld, i 182
Thucydides, ii 236, 238, 240, 357 note
Thunberg, prof., i 178, 182, 185, 427; ii 46, 47, 48, 323
Thury de, *see* Cassini.
Tibullus, ii 237, 239
Tichorsky, iii 162
Tickell, T., iii 84
Tiedemann, prof., ii 202
Tilas, i 234, 236
Tillet, i 177; ii 104
Tilloch, Alex., i 197 note, 395; ii 117, 151
Tillotson, abp., ii 295
Tindal, Dr. Matt., *ii 344 note*
——— Nic., ii 344, ib. note
Tissot, ii 13
Toaldo, i 251
Tode, i 179
Toderini, ii 54
Tofino, ii 62
Tolstyke, ii 50
Tooke, ii 53 note, 54, 321 note; iii 154 note
——— J. Horne, ii 306, 334, ib. note, 335, 336, ib. note
Toplady, ii 215
Toren, i 186
Torild, iii 6
Tott, baron de, *ii 54*
Toup, ii 236
Tourbilly, ii 104

Tournefort, i 164, 165, 166, 173
Tourreil, ii 240
Townshend, i 350
Townson, Dr. R., i 155, 197
Toze, iii 175
Trapp, i 170 note
Trembly, i 159
Triesnecker, i 81
Trew, i 272
Trimmer, Mrs., iii 124, 132 note
Troil, rev. Dr. von, ii 33
Tromsdorff, i 391
Troostwyck, van, i 124
Trotter, Dr., i 363
Troughton, i 86
Trumbull, J., ii 130, ib. note, 131 note, 155; iii 28, 68, 243, 266
——— Jon., ii 130 note
——— rev. Dr. Benjamin, ii 353
Tschirikow, capt., ii 28
Tschulkof, iii 163
Tucker, Abraham, ii 215, ib. note
Tudor, judge, iii 104
Tull, Jethro, ii 93
Tumansky, iii 163
Turdot, ii 368
Turner, (geogr.) ii 57
——— (paint.) ii 135
——— Sam., ii 45
Twining, ii 238
Tychsen, prof. O. G., ii 245, 256 note; iii 179
Tyrwhitt, iii 66 note
Tytler, ii 239

U.

Uhden, iii 163
Ulloa, don, i 72; ii 34, 40, 58
Ulrica Eleonora, queen of Sweden, ii 319
Unzer, iii 171
Upton, ii 236
Urfe, d', ii 372
Uslar, von, ii 96, 97.
Uz, iii 19, 177

V.

Vagonof, iii 163
Vaillant, i 153, 160, 179, 179; ii 48, ib. note
Valckenaer, L. C., ii 229, ib. note, 232 note, 353
Valenciens, ii 135
Valentini, i 276 note
Valli, Euseb., i 38
Valsalva, i 273
Vanbrugh, sir J., iii 59
Vancouver, ii 29 note, 49
Vanderlyn, ii 135 note
Vandermonde, ii 74
Vandyke, ii 128
Vanhall, ii 148
Vanier, i 366; iii 18
Vardill, J., iii 334
Varrentrapp, iii 114
Vassant, ii 366 note
Vater, i 273
——— prof. J. S., ii 256
Vattel, iii 348
Vaugel, i 189
Vauquelin, i 94, 103, 124, 126, 177, 192, 199, 201; ii 8
Vega, ii 80
Venel, ii 5

Verbergins, ii 236
Verey, i 148
Verheyen, i 286
Vernet, ii 135,
Verney, du, i 276 note
Vernon, W., i 182, ib. note
Veron, iii 331
Verplanck, Sam., iii 220 note
Vertot, de, ii 348, ib. note
Vertunian, ii 366 note
Vesalius, i 262
Vicq-d'Azyr, *see* Azyr
Vidal, i 80
Vien, iii 163
Vieussens, i 306
Villoison, ii 232, 233, ib. note
Vince, i 89
Vincent, ii 131, 137
Vinci, L. da, i 261
Virgil, ii 236, 239, 240; iii 63, 159 note, 164 note, 339, 343
Vogel, R. A., i 350; ii 3; iii 174
Voigt, i 197; iii 174
Voigtel, T. G., iii 169
Volney, ii 44, 47
Volta, i 30, 33, ib. note, 35, 103, 134, 389, 390, 391, 392, 394, 395, 421
Voltaire, ii 311, 330, 341, 348, ib. note, 349, 351, 368, 378, 387; iii 7, ib. note, 18 note, 24 note, 49, 53 note, 54 note, 61, 309 note
Voss, J. H., ii 240, ib. note, 316; iii 13, 30, 177
Vossius, iii 88 note
Vulpius, ii 237

W.

Wachter, ii 325; iii 168
Wagner, ii 349
Wahl, von, i 89; ii 261; iii 179
Waitz, i 25
Wakefield, Gilb., ii 236, 237, ib. note; iii 13 note
——— Mrs., iii 124, 132
Walch, iii 175
Walker, Dr., i 194
——— G., ii 75
——— Jas., iii 305, 306, 309
——— J. C., iii 52 note
——— J. M., i 426
——— prof., i 177; ii 94, 102
——— R., i 120, 121
Waller, Edm., iii 3
Wallerius, i 105, 189, ib. note, 190 note, 191 note, 235; ii 96
Wallis, capt., ii 32
——— Dr. J., i 365
Walmsly, i 73
Waln, Nic., iii 198
Walpole, Horace, *see* Orford, lord
——— sir Rob., ii 365
Walsh, i 389
Walter, J. G., i 272, 273
——— T., i 183, ib. note; iii 264, ib. note, 276 note
Walters, Dr., ii 32 note
Walton, bish., ii 244
Wangenheim, i 183, ib. note; iii 276 note
Warburton, bish., iii 48
Ward, ii 358
Wargentin, i 80, 83, 251
Warham, J., iii 188, ib. note

Waring, Ed., i 50, 51 note; ii 73, 74
Warner, R., ii 240
Warren, Dr. J., ii 22
Warton, Dr. Jos., ii 239; iii 35, 66 note, 67 note
—— T., ii 358
Waterhouse, Dr. Benjamin, i 358 note, 429; ii 22; iii 264
Watson, bish., i 25, 27, 28, 91, 134, 244 note, 264; ii 300, 301
—— Dr. R., ii 347
—— (optician), i 66
—— (teacher of deaf and dumb), i 366
Watt, ii 51
—— Jas., i 57, 290, 401, 402; ii 89, 118, ib. note, 120
Watts, Dr. Isaac, ii 213, ib. note; iii 21, 35, 330
Webster, N., i 362; ii 304, 306; iii 124, 253
—— jun., iii 260 note
Wedgewood, i 121, 124, 132; ii 122, 141
Weiglib, i 128
Weisse, iii 36, 55, 178
Weitbrecht, i 271; iii 174
Wells, ii 61
—— Dr. W. C., i 62
Wenix, ii 135
Wenner, iii 114
Wenzel, i 135
Werner, Abr. G., i 193, 194, 200, 236; ii 174
Wesseling, ii 230
West, Ben. (math.), iii 240, 261
West, Ben. (paint.), ii 130, ib. note, 131 note, 134 note, 137 note, 138 note, 155; iii 266
—— Gilb., ii 239
—— Mrs., ii 389; iii 132 note
Westall, ii 145
Westerhovius, ii 237
Westrumb, i 117, 257
Wetstein, ii 251, 252 note
Wetzel, iii 53
Wharton, T., ii 236
Whately, T., i 374
Wheelock, Dr. Eleazar, iii 241, ib. note, 242, 339
—— J., iii 242 note, 339
Whiston, W., i 39, 206, 207; iii 190 note
Whitaker, J., ii 346 note; iii 63 note
Whitby, Dr., iii 230 note
White, C., i 377
—— Dr. Jos., ii 251, 261, 262, 263
Whitehurst, J., i 197, 218, ib. note, 219, 222; ii 77, 78 note
Whitelaw, ii 62
Whitney, iii 266
Whittemore, Amos, ii 112; iii 266
—— Wm., ii 112 note
Whitworth, ii 89
Whytt, Dr., i 282, 324, 368
Wieglib, ii 358
Wieland, ii 240, 316, 350, 389; iii 4, 5, 11, ib. note, 19, 36, 171, ib. note, 176, 177

Wilcke, i 28
——— prof., i 133
Wilde, ii 350
Wildenow, iii 173
Wilford, col. Fr., ii 277
Wilkie, Dr. W., iii 9, ib. note
Wilkins, bish., ii 304
——— C., ii 271 note, 272, 273
Wilkinson, Jas., ii 283
——— J., ii 114
Will, ii 202; iii 118 note, 167 note
Willard, i 90; iii 261, 336
Willemet, i 182
William, king, iii 348
Williams, col. Ephr., iii 337, 338
——— David, iii 119
——— Elisha, iii 211, 223, ib. note
——— J., i 223, ib. note, 224
——— miss H. M., ii 389; iii 132 note
——— rev. Dr. Sam., i 162 note; ii 58, 353
Williamson, ii 62
——— Dr. Hugh, iii 202 note, 215 note, 240, 262, 271 note
Willich, Dr., i 40; ii 13, 195 note
Willis, Dr., i 306, 329
Willoughby, i 143
Wilson, i 66, 121, 181
——— ii 135
——— capt., ii 39
——— prof. C., ii 245, 249, 259
Wilson, rev. Dr., ii 355 note
Wilton, J., ii 140
Winckelmann, J., ii 359
Winckler, prof., i 25; iii 173
Winslow, prof., i 265, 270
Winterbotham, ii 51
Winthrop, i 89, 398; iii 105 note, 188, 224 note, 240, ib. note, 261
Wintle, Dr., ii 257 note
Wintringham, i 368
Wirtz, i 51
Wisin, van, iii 163
Withering, Dr., i 67, 178, 181, 197; ii 3, 8
Witherspoon, Dr. J., ii 184 note; iii 244, ib. note, 247
Witt, Sim. de, ii 62 note
Woide, Dr. C. G., ii 118, 251
Wolcot, Dr., iii 27, ib. note, 188
Wolfe, Christ., i 20; ii 74, 188, ib. note, 189, 195 note, 315, 366 note; iii 155, 167, 173
——— F. A., ii 236; iii 178
Wollaston, Dr., i 390, 392, 394
Wollstonecraft, M., *see* Godwin, Mrs.
Woltersdorff, i 197; iii 174
Woltman, iii 173
Woodhouse, Dr., i 181, 387, 418; iii 263
Woodhull, ii 239
Woodville, Dr., i 353 note, 358; ii 3
Woodward, Dr. J., i 188, ib. note, 206; iii 196 note
——— W. W., iii 244 note

Woollet, ii 146
Worcester, marquis of, i 56, 400
Worthington, Dr. W., i 217
Wright, iii 304 note
——— Mrs., ii 140
Wrisberg, i 272
Wurbierg, i 89
Wurm, i 89
Wurz, iii 172
Wyllys, iii 188

X.

Xenophon, ii 236, 238, 240, 366 note; iii 336, 343

Y.

Yærig, iii 164
Yale, gov. T., iii 196, ib. note, 341
Yearsley, Mrs., ii 389; iii 132 note
Yekimof, iii 159 note
Yelaghen, iii 163
Young, Ar., ii 103
Young, Dr. E., iii 20, ib. note, 24, 42, 70, 71
——— Dr. T., i 58
——— sir Wm., ii 50 note

Z.

Zach, Dr. von, i 79, 80, 405; iii 173
Zanotti, i 89
Zaratusht, *see* Zoroaster.
Zeder, i 159
Zeiher, i 64
Zeisberger, ii 325, ib. note
Zeno, Apostolo, ii 313
——— the stoic, ii 420
Zeunius, J. C., ii 236, 237
Zimmermann, Dr. J. G., iii 171
——— prof. E., i 146, 148, 273, 284, 323 note; iii 173
Zinn, i 272, 284
Zoega, i 180
Zollikofer, G. J., iii 171
Zopyrus, ii 156 note
Zoroaster, ii 265, ib. note

Printed by Ellerton & Byworth, Johnson's Court, Fleet Street.

JAN 2 8 1935